



Customer Case Study

School District Offers Distance Learning and Improves Efficiency

EXECUTIVE SUMMARY

BROWARD COUNTY SCHOOL DISTRICT

- Broward County, Florida, United States
- 275,000 students
- 40,000 employees

BUSINESS CHALLENGE

- Provide instruction to homebound students
- Increase cost-effectiveness and convenience of district meetings
- Accelerate restoration of school operations following natural disasters

NETWORK SOLUTION

- Deployed Cisco Unified MeetingPlace system for voice conferencing with Web collaboration
- Built Cisco foundation infrastructure for wired and wireless networks

BUSINESS RESULTS

- Conducted 3624 remote class sessions for homebound students in 2005
- Conducted 750 district meetings via conferencing in 2005, saving time and mileage costs
- Accelerated resumption of normal school operations following Hurricane Wilma

Broward County School District uses Cisco® Unified MeetingPlace for education, meetings, and coordination of hurricane recovery.

BUSINESS CHALLENGE

The sixth largest school district in the United States, the Broward County School District is a \$4.4 billion entity with 275,000 students; 270 elementary, middle, and high schools; and more than 40,000 employees.

To provide classes for middle school and high school students who are too ill to attend school for one month or longer, the district offers a Hospital Homebound Program. Students dial a telephone number to join a class with a teacher and other homebound students. A similar program, Expulsion Abeyance, provides virtual classes for students who would ordinarily be expelled; students who successfully participate in the program for one year can reenter regular classes.



Planning a move to new offices, the district's Education Technology Services (ETS) group decided to replace the aging voice-conferencing system used for the home-learning programs. "Our primary goal was to enhance educational learning opportunities by

supplementing voice conferencing with Web collaboration," says Dr. Gary Brown, Conferencing Services Manager for the district. Another goal was to extend the use of voice conferencing to parent-teacher conferences and staff meetings, including in-service training. "Replacing in-person staff meetings with voice conferences would eliminate two-hour round trips for some participants and avoid high costs of mileage reimbursement," says Ed Kessler, Systems Analyst in the Conferencing Services unit of ETS.

Primary criteria for the new system were scalability, ease of use, and security. With the old audio-conferencing system, anybody who entered a valid meeting telephone number could join a conference without the organizer knowing, and limited reporting features made it difficult to detect unauthorized after-hours use.

NETWORK SOLUTION

The Broward County School District now uses a Cisco® Unified MeetingPlace® voice- and Web-conferencing system for the Hospital Homebound Program, Expulsion Abeyance Program, district meetings, and response coordination for natural disasters such as hurricanes. The District's wired and wireless networks are based on a Cisco foundation infrastructure. Voice traffic travels over the public switched telephone network.

To attend classes remotely, students use any landline or cell phone to dial the Cisco Unified MeetingPlace system and then enters the unique meeting identification number and their unique user profile number, for their class. Some classes, such as geometry, combine voice conferencing with Web collaboration and require that students have a PC with an Internet connection. With a single sign-in, students can

participate in the voice conference and concurrently view in a Web browser the words or images that the teacher draws on a tablet connected to his or her PC. “The Web collaboration capabilities in Cisco Unified MeetingPlace allow instructors to teach processes step-by-step, just as they would in the classroom using a whiteboard,” says Kessler.

The Cisco Unified MeetingPlace system provides teachers with many classroom management capabilities that they would have in an ordinary classroom, including seeing who is in the meeting, seeing who is speaking, and muting or ejecting students who become disruptive or introduce background noise such as barking dogs. Teachers use the polling feature of Cisco Unified MeetingPlace to give online quizzes. Students can move from the main classroom into breakout sessions for small-group discussions, and teachers can join the various breakout sessions to provide feedback and direction. Cisco Unified MeetingPlace also enables teachers to record a classroom session, so that students who miss class can play back the audio file later, using either a phone or Web browser. These audio sessions can even be saved on a CD for archival.

When the Broward District decided to use the Cisco Unified MeetingPlace system for administrative meetings as well, it upgraded the system capacity to accommodate 294 concurrent users. Security features of the Cisco Unified MeetingPlace system provide safeguards against unauthorized access by outsiders and enable the district’s ETS group to monitor user activities to prevent unauthorized use.

The Broward County Public School District has also uses its Cisco Unified MeetingPlace server to coordinate command, control, and recovery efforts after hurricanes. “When our county was struck by a series of hurricanes in 2004, we realized that Cisco Unified MeetingPlace was a phenomenal utility for coordinating post-storm recovery actions,” says Kessler. Cisco Unified MeetingPlace facilitates crisis response by enabling participants to use any phone or Web browser, supporting breakout groups and session recording, and protecting confidentiality by requiring logons and enabling the coordinator to see who is in the meeting.

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—Ed Kessler, Systems Analyst, Broward County School System, Florida

BUSINESS RESULTS

In the school year ending June 2005, the district’s Hospital Homebound Program used Cisco Unified MeetingPlace system to deliver more than two million minutes of instruction during 3624 class sessions. During the same period, the District used the Cisco Unified MeetingPlace for more than 750 district and staff meetings. “When you augment the telephone with Web collaboration, it becomes a very valuable tool for the day-to-day work of a school district, including both online learning and administrative meetings,” says Brown.

Conducting staff meetings on Cisco Unified MeetingPlace improves teacher productivity by saving up to two hours driving time. It also eliminates mileage reimbursement, which amounts to almost \$45 per teacher for a 100-mile round trip.

During the 2004 hurricane season, the school district made the Cisco Unified MeetingPlace system available to the Florida National Guard and Florida State and County Emergency Operations Centers (EOC), which used the system to coordinate with 67 counties after the storms. National Guard personnel saved time by remaining in the field and presenting their findings in voice and Web conferences, including viewing spreadsheets and databases. “The ability to collaborate and have direct discussions enabled us to resume normal citizen services seven to ten days earlier than usual for this type of disaster,” says Brown. “A centralized voice and Web collaboration session ensured that everyone had consistent information on which roads and electrical towers were still out of service, and where water, food, ice, and other supplies were needed.” The Florida Commendation Medal was awarded to Superintendent of School, Dr. Frank Till as well as to ETS employees Vijay Sonty, Dr. Gary Brown, and Ed Kessler for their expertise and the use of Cisco Unified MeetingPlace.

During the two-week period in the aftermath of Hurricane Wilma in October 2005, the District itself used the Cisco Unified MeetingPlace system to coordinate response for schools. A conference room in the district's data center became the command and control center, and the Cisco Unified MeetingPlace system handled 1300 hours of voice conferencing and Web collaboration, involving more than 1000 maintenance people, supervisors, and senior managers. Before the storm arrived, the District and government officials established regular call-in times that personnel would use if they had phone service. "Without the Cisco Unified MeetingPlace system, we would have had to rely on phone trees to disseminate information to senior management, support staff, and school principals, a very inefficient approach because more than 90 percent of the county did not have phone service," says Kessler. "The staff was able to move back into the District headquarters within ten days—much faster than we would have without Cisco Unified MeetingPlace."

PRODUCT LIST

Routing and Switching

- Cisco 2600 Series and 2800 Series routers
- Cisco Catalyst switches

Application Networking

- Cisco 500 Series Content Engine
- Cisco Application and Content Network System software

Network Management

- CiscoWorks

Security

- Cisco PIX Firewalls

Voice and IP Communications

- Cisco Unified MeetingPlace

Wireless

- Cisco Aironet Wireless Access Points
- Cisco WLAN Controllers

NEXT STEPS

The Broward County School District's ETS Department plans to increase its use of Web collaboration to enhance education. One idea is to offer after-school study sessions for the Florida Comprehensive Assessment Test, in which students dial in from home and view problem-solving demonstrations on the Web using their computers. Other ideas are to offer specialized voice and Web to exceptional students and to provide information sessions for parents.

The ETS group is investigating using Cisco Unified MeetingPlace with videoconferencing endpoints and Cisco network monitoring tools to proactively monitor the district's network operations centers. "The district's goal is to be an on-demand business that operates in a 24-hour environment to protect the safety of students," says Vijay Sonty, CIO for Broward County Public Schools.

The district also plans to build a Convergence Center that provides integrated voice, video, and data solutions for facilitating real-time decision-making in response to hurricanes and other emergencies. "We plan to bring in video, satellite images, weather

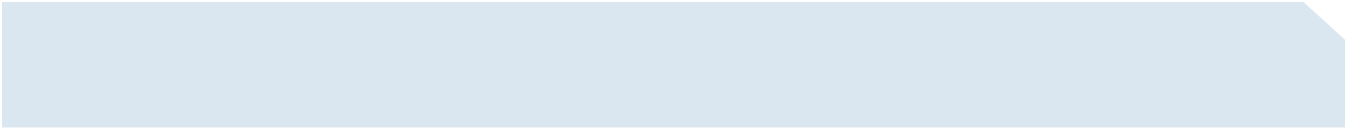
channel information, and more to track hurricanes and enable the real-time interaction needed to make timely, well-informed decisions," says Sonty. "Use of open standards in Cisco Unified Communications will help us meet our goals. We believe in the Cisco Intelligent Information Network model, and look forward to extending our partnership and deploying new products that improve educational excellence and safety in the district."

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To find out more about Cisco MeetingPlace Solutions, visit: www.cisco.com/go/meetingplace.

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This customer story is based on information provided by Broward County Public Schools and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

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