



Crestron DigitalMedia™ and RoomView™ Keep Class In Session at Wharton

Background

Located in Philadelphia, The Wharton School of the University of Pennsylvania is recognized globally for intellectual leadership and ongoing innovation across every major discipline of business education.

In 2009, the school faced a dilemma as the threat of Influenza A (H1N1) was widespread. The Public Technology group in Wharton Computing was tasked with creating a readiness plan should the threat of significant absenteeism due to illness affect students, faculty and staff.

The school's education mission was a priority in the planning process so class recordings for remote viewing were considered a way for students to participate in class without physically being there. Wharton needed to outline a plan to maintain room control, manage technology with limited staff and equipment resources, and deploy new features or resolve issues in multiple rooms while classes are in session.

The Challenge

Wharton lacked a central control system for their AV equipment. To manage, monitor and troubleshoot equipment, 15 staff members were distributed throughout the building each day to physically tend to the systems. To conduct recordings, support staff had to physically be in the classroom to verify camera position, adjust audio and confirm settings to get the recording in a viewable state.

Wharton Computing discussed their needs with faculty, staff and local partners, Systems Integrator, Cenero in Malvern, PA and Programmer, PepperDash Technology Corp. in Reston, VA, to determine the goals of an integrated IT/AV system.

The Solution

To effectively manage 75 conference rooms, labs, classrooms, auditoria and colloquia, requirements were defined, issues to be resolved were discussed and features to be added to the new system were determined. Crestron RoomView™ Enterprise Management was chosen to deliver a complete facility-wide network control of AV resources and support simultaneous start of recordings in every classroom.



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Sumanth Rayancha, VP/CTO, PepperDash Technology Corp.

RoomView enables Wharton administrators and support staff to manage AV resources, perform remote system diagnostics, track the usage of projector lamps, log network activity and automate tasks through event scheduling. Interactive help desk capabilities allow professors to send help requests from their touch screen to support staff. Wharton Computing can send instant text messages back to the touch screen, alert e-mail contacts, and even launch e-Control®2 to control the classroom and its AV equipment.

Wharton hosts over 35,000 individual events on campus each year with classrooms, auditoria and colloquia used for academic purposes 55% of the time while special events like conferences, meetings, panel discussions and guest speakers use the facilities 45%. These facilities are treated like an IT resource to control, maintain and schedule events and settings.

Wharton applied IT practices to their AV approach. Crestron DigitalMedia™ was installed to work with RoomView to manage, control and distribute all analog and uncompressed HD digital content. With the assistance of DVPHD, the only multi-window video processor that displays high-res computer and high-definition video signals with HDCP, a test room was developed to perform experiments, find issues, correct issues and confirm changes before the school deployed the systems to the 40

classrooms. The system provides a fully-customizable HD graphics environment, and enables real-time annotation and touch screen control.

Systems at a Glance

While H1N1 was no longer a major concern, the first day of the new fall semester landed on an observed holiday, making it difficult for students to attend class. With the new system in place, students could attend class remotely – whether they are ill or observing a holiday, using the class recording capability. The one touch recording could be conducted and then pushed to the web with no administration involved. This alleviated any concern students had with missing class and being behind for the semester. Now 150 classroom recordings are conducted each day for students to reference.

“It is next to impossible to conduct simultaneous start recordings and we couldn’t do this without RoomView,” explained David Siedell, Senior Director of Public Technology at the Wharton School of the University of Pennsylvania.

In the past, Wharton had real problems with getting the status of equipment. Usually a problem wouldn’t be found in the department’s daily monitoring of the system. Instead faculty members would discover the problem minutes before class started and scrambled to move to another available room.

With RoomView, Wharton could monitor equipment functionality and battery life throughout the day, and fix issues quickly and efficiently. When a system fails, Wharton Computing could reconstruct what was done post-mortem in the Test Room to figure out what was done before the system failed. Administrators can also evaluate which features faculty members are using so they can be refined in next generation versions of the software.

Systems Integrator, Tom McElwee reproduced the existing classroom systems in the Test Room.

“We worked closely with Wharton and PepperDash to successfully deploy a superior system for managing and troubleshooting,” noted McElwee.

Four staff members can now manage the system instead of 15. Support staff receives reports on AV feedback which help perform remote system diagnostics, track the usage of projector lamps, log network activity and automate tasks through event scheduling. Faculty can set up a profile which includes a snapshot of the room – lighting and audio settings, set it and login to the network to use the custom setting in different classrooms. Faculty has everything they need to conduct a lesson without interruption.

The installation was conducted in two phases over the last year with the latest rooms completed in the summer of 2010. PepperDash conducts code maintenance and regularly tests and deploys RoomView updates on a semester by semester basis since the software is a living object. With the addition

of new faculty users, Wharton Computing offers thorough training of the new system and responds immediately to troubleshoot any issues that arise.

Benefits

Using the new interface, IT can control the AV from anywhere using an iPad™. With several management and technical support functions streamlined, administrators can work more efficiently, reducing the support response time. Technology is helping the school accomplish more and rely less on an army of IT members.

“We implemented extensive control and monitoring capabilities, which allow a small number of support personnel to assist faculty and staff in using the room technology and recording classes,” said Sumanth Rayancha, Vice President/CTO, PepperDash Technology Corp.

“Remote management of all room systems has substantially reduced the number of technology failures during live class time,” Rayancha added.

Today, RoomView runs in 75 rooms at Wharton. The administrators plan to expand to 57 small group study rooms for presentation and teleconferencing purposes.

The Crestron system monitors and reports to Wharton the energy savings achieved with RoomView. When classes are not in session, equipment is powered off, reducing light output by 15%. Wharton continues working on energy management and improving efficiency of equipment and hopes to achieve LEED certification.

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