

PRENET NETNEWS



Did You Know?

CUSTOMER SPOTLIGHT: HARVARD JOHN F. KENNEDY SCHOOL OF GOVERNMENT

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Harvard Kennedy School

Harvard Decision Science Laboratory

PRENET spent late summer and early fall working on a custom designed, highly technical audio visual solution for the Harvard Decision Science Laboratory. PRENET's president, Steve Immerman led the team that designed and implemented this technology. "It is exciting to be a part of such an important research tool," said Immerman. Part of our PRENET team attended the ribbon-cutting ceremony on Dec 5th at Harvard University. They followed that up with a fun filled weekend in Boston.



THE HARVARD JOB FROM A TECHNICIAN'S POINT OF VIEW

The Hardware:

For the testing of subjects; 36 individual cubicles (3 sections of 12) contain two computers (section 1 only at this time), one identified as a stimulus pc and another for the physiological processing -recording, 2 LCD monitors, a modified (quick response) keyboard & mouse, a hidden CCTV-camera and headphone with integral microphone for 2-way communications. Crestron hardware was utilized for all the control functions. This included all lighting within the lab space, the cubicles, the overhead audio -(8 speakers at each section), all video and audio sources. The lab can function as a 36 position, 24 position or 12. Each can be independent of the other in sources criteria or combined for large group sessions. For processing, the PRO2 Professional Dual Bus Control System was used. One located in the rack at the head of each section, with one additional master processor for distribution/programming instructions to each of the three.

At the examiner's station a Sharp 46" LCD 1920x1080 monitor provides a customized touch screen graphic control interface between all the hardware and the operator. A Crestron DVP-PRO-QM is used as the touch panel interface for the monitor.

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PRENET Fun Fact:

On special days, PRENET employees have been known to take part in Storytime.



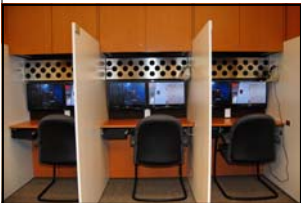


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An examiner computer, dual keyboard and mouse (one set for the examiner pc another set for control of the individual stimulus pc at each cubicle) and a CCTV camera to display the examiner image at the cubicle on their monitor – when selected. The touch panel interface provides the examiner the ability to monitor the on-going study by individual or by group, control of the source media in use for a study, control of the environment lighting, 2-way communication between the examiner and subjects, or communications between subjects themselves for group negotiations.



For the audio-video distribution, Crestron QuickMedia transport was selected to significantly reduce the amount of wiring required (high resolution RGB, HD video, stereo audio, and microphone signals over a single CAT5e type cable). Two- QM-MD16x16 matrix switchers are installed at each section's rack, one additional QM-MD16x16 switcher is then shared as part of the virtual examiner configuration (which allows the combining of the three sections).



At the cubicles a Crestron QM-MD7x2 and QM-RX is installed and provides the interface for the two monitors, stimulus/physio pc, headphone and microphone audio. Crestron DIN-8SW8, Din rail high voltage switch – with 8 feeds – 8 channels and DIN-A08 Din rail analog output module are used for individual On-Off control and dimming the lighting. For control of the general lighting at each of the three sections, a Crestron CNLFDB – 4/277 Fluorescent Dimmer is used with the PAC2M Professional Automation Mini Control. A 4 button wall mount keypad (CNX-B4B) is also installed at each section. To allow a subject at a cubicle to request assistance from the examiner a Crestron C2N-CBD-W-S 2 button module is installed in the front wall of the cubicle. The buttons also function as a “Push to Talk” for the microphone when speaking to the examiner.



Audio:

For the audio processing, Audia Flex CM, Audia EXPI – EXPO is used. At each of the section racks there are 2 Audia Flex CM, 3 Audia EXPI and 3 Audia Flex EXPO input – output expanders. The Audia Flex CM has a serial connection to the Crestron PRO2 processor. All mixing and distribution of the section line/ microphone audio is processed through the Audia Flex product. CobraNet and Ethernet from the Audia Flex and Audia EXPI-EXPO units are tied together through an Ethernet switch. This allows the sharing of digital audio signals (CobraNet) and control data (Ethernet) on a network.



Cube – Camera:

Hidden behind a false panel with an obscured opening is an EVI-D70 Sony PTZ camera that provides viewing of the subject for real-time recording of emotional and physical reactions to the stimulus criteria. The camera also allows for real-time display between subjects as well as the examiner. The cameras can be moved and have zoom in-out for precise capture of the reaction to the stimulus in use.



CCTV-Video Matrix:

At each section there are 13 EverFocus – EDR1640 16 channel, DVR units installed in the racks. The DVR's do not have hard drives and are used for their multiplexing capabilities. The DVR's are interfaced to the 4 AMX AutoPatch (8Y-3000 series) 32x64 switch for distribution. An Ethernet connection to the switch provides control.

Programming:

The programming for the system was to say the least mountainous and presented its own set of rules and hurdles; the sheer number of modules required is staggering and would humble even the strongest of analysts. Enter Steve Immerman, (President of Premier Network Solution) the person solely responsible for the programming. The final solution for the project is a true testament to Steve's programming abilities and in-depth knowledge of the Crestron products.

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Summary:

The installation started on September 2nd and continued non-stop through November 14th. To be part of a special projects team, working at Harvard University, and building a state of the art audio visual system interface was very exciting; and this momentum carried the team through the difficulties of working remotely for 2-1/2 months. To have the project completed is bitter sweet; we are of course excited to see the University setup to begin full use of the LAB in the spring of this year. And in fact some limited use and tours occurred during the final weeks of installation! We are pushing the technology and our abilities with this project, and that makes all the hard efforts worthwhile. When you have a goal to achieve, and must work through the difficulties to attain that goal, the reward of success is truly gratifying.

What's next? Time will tell, the Lab's use will obviously evolve over time and the systems installed there are flexible. We can now duplicate the systems in a verity of configurations - smaller footprints for satellite locations should the University take that approach. Perhaps Phase III is already being discussed!

For more information visit: www.decisionlab.harvard.edu

rad/contributing staff writer for Prenet- Nuggets; informational bulletins.

PRENET WELCOMES NEW EMPLOYEES

Richard Dalton

Richard joins PRENET with 28 years experience in systems integration; Automated Access Control - CCTV - Intercom - VTC - AV to name a few.

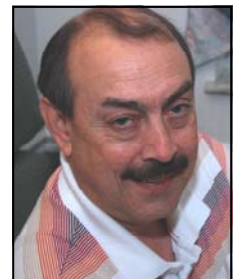
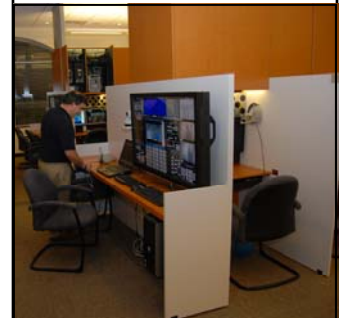
In his past experience, his primary responsibilities included Project Manager - Project Engineer - Engineering Services Manager.

Richard started in the business as a sub-systems fabricator and worked up the ladder into installation - service - project management and project engineering. He has always believed that "you respect your customer, provide a professional work ethic, and work together as a team externally and internally."

Scott Reuter

Scott comes to us with over 32 years of telephony experience. He spent 29 years at his previous employer where he gathered a great deal of telephone system knowledge and experience.

A Cincinnati native, Scott graduated from Finneytown High School and has been married for 16 years to his wife, Patricia. He enjoys camping, boating, and home improvement projects. Scott takes a special interest in maintaining his 5 cars.





PRENET HOSTS HEALTH FAIR W/ XAVIER NURSING STUDENTS

In November, PRENET hosted a Health Fair sponsored by Xavier University Department of Nursing. Those who attended got free blood pressure screens and had their blood sugar tested. Attendees also learned about exercise, nutrition and Type II Diabetes.





PRENET would like to thank the Xavier Nursing Students for volunteering their time to enrich our health related knowledge.

TEAM MEMBER ACHIEVEMENT

This column is dedicated to the recognition of achievement by PRENET personnel.



- Steve Immerman, Bob Sherman, Heidi Turner and Ryan Jackson attended InfoComm 08.
- Amy Hazelbaker's outdoor women's soccer team won the league for the 3rd year in a row. 
- Heidi Turner completed the InfoComm Project Management for AV course.
- Bob Sherman completed the InfoComm Principles of AV Design course.
- Ryan Jackson earned his CTS-I .
- Dan Barnett's band, The Bad Words, was nominated for a CEA (Cincinnati Entertainment Award) for best country act.
- Steve Immerman, Jason Hill, Richard Dalton, Stephen Berger, Jennifer Immerman, Holly Alwell and Heidi Turner attended the ribbon cutting event at Harvard University.
- Heidi Turner celebrates 10 years with PRENET January 2009.
- Jason Hill will take part in the Polar Bear Plunge for the Special Olympics in February. 



WE KEEP YOU WELL CONNECTED