

➔ Challenge

Outfit a multi-purpose courtroom to train law students on the technology they will need to master as 21st Century attorneys.

➔ Solution

Carefully thought-out systems based on Crestron DigitalMedia™ and Crestron control.



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— **Craig Williams**

*Saint Louis University
Manager, Multimedia Services*

Cutting Edge Courtroom

Saint Louis law school defines what courtroom technology should be

It's no surprise that the courts have become heavy users of audio and video systems: surveys conducted more than 10 years ago revealed that the vast majority of judges felt that evidence presentations using video technology helped them to reach better decisions, and more than 90% of jurors agreed.

Yet using technology effectively remains a challenge for many attorneys, one that the Saint Louis University (SLU) School of Law is determined to overcome—at least for those they train.

Their new academic building, Joe and Loretta Scott Hall, is a showplace for digital audio and video systems: 24 classrooms, lecture halls, conference and consulting rooms have high-definition systems installed, including a beautiful new courtroom on the top floor.

At the heart of the new systems in all of these rooms is Crestron DigitalMedia and Crestron control.

The West's oldest law school

Founded in 1873, the Saint Louis University School of Law is the oldest law school west of the Mississippi. Located in the center of the riverfront city, it offers students a rare opportunity to access leading law firms, corporations, government agencies and non-profit organizations, seeing the law in action as they learn about its practice.



The new home of the SLU Law School is Joe and Loretta Scott Hall, an office high-rise donated by building owners Joe and Loretta Scott. A massive, \$30 million renovation included the addition of a glass-enclosed 12th floor, a rooftop deck, new elevators, a street-level restaurant, a two-story library, plus the classrooms and meeting rooms.

The John K. Pruellage Courtroom, on the new 12th floor, is the largest and most technically advanced space in the building.

Intended for multiple purposes, the room is used most days from 7:30 in the morning to 7:00 at night for lectures, classes, presentations, mock trials and, three to four times each year, actual trials by the United States District Court of Eastern Missouri.

“Before we designed the room, we looked carefully at courtrooms in the Thomas Eagleton Federal Courthouse in Saint Louis,” says Craig Williams, Manager, Multimedia Services. Williams says the design team also visited a number of leading law schools to learn how they use technology, including Northwestern University and Loyola University in Chicago. “A big part of our mission is to help our students transition into the real world,” he explains. “We need to be sure they are ready for whatever kind of technology they’ll encounter as attorneys.”

Like many courtrooms, this one at SLU includes flat screen displays for the judge, jury, witness, clerk, and attorneys for the defense and prosecution (or,

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Saint Louis University

in civil trials, for the plaintiff). There are microphones throughout the room plus a document camera, Blu-ray player and plug-ins for laptops and additional video devices. There’s an annotation device, very useful for calling attention to specific aspects of evidence enlarged on various monitors. Crestron touch screens at each counsel’s table make it easy to control the AV systems, although the judge’s touch screen can override them. The room also serves those attorneys who wish to use PowerPoint® slides and embedded video during presentations, especially during opening and closing arguments.

Unlike the majority of courtrooms, there’s a Polycom® video conferencing system with four Vaddio® pan/tilt/zoom cameras. The video conferencing system serves



a growing trend to bring witnesses (especially expert witnesses) into trials via video, rather than spending the money and time to fly them in from other cities. It can be used to record video depositions as well. “There’s also a big push from the Law School to set up consultations with people outside of Saint Louis,” Williams adds. “For example, they are helping a large group of women in Afghanistan with pressing legal issues.” These consultations sometimes take place in the courtroom, although professors are more likely to use video conferencing systems installed in two smaller rooms in the new building.

SLU also uses the PTZ cameras to record mock trials and lectures and upload them to a lecture capture system, which is fully integrated with Crestron control and the school’s Blackboard® online learning platform. There’s a podium with its own monitor and touch screen, a gallery with seating for 250 to 300 students, and two NEC® projectors paired with 13-foot diagonal screens.

Designing the systems

Tim Heidemann, Senior Systems Engineer and Project Manager for TSI Technology Solutions of St. Charles, MO says the majority of the design decisions for the courtroom and the classroom technology were made long in advance of this project.

Partnering with TSI, SLU standardized on Crestron technology more than seven years ago, and they now

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— Jeff Pride

TSI Technology Solutions

have three Crestron DigitalMedia Certified Engineers on staff. All of the Scott Hall classrooms and conference rooms include DM 8G networks, tied together using Crestron Fusion™ RV for asset management and helpdesk functionality.

While the project went out to bid, SLU asked for design/build proposals rather than using a consultant to specify the equipment to be used in the new building. That being said, Multimedia Services made a number of specific requests for the components to be used, including the particular Crestron touch screens and DigitalMedia switchers that they preferred. “I’m very fortunate in the team I have working for me,” says Williams. “We’re able to look at what we want and assist in the design of the space.”



One of the things that Williams and his team requested was the ability to show multiple windows on the two projectors, which TSI satisfied with a Crestron DVPHD multi-window video processor. “They use it mostly in lectures, rather than trials,” TSI Senior Systems Engineer and Crestron Programmer Jeff Pride explains. The processor, using Crestron Smart Graphics™ ‘widgets’ to simplify source selection, allows them to show one large and up to four smaller images simultaneously to a class: for example a PowerPoint slide, an image of the instructor, a contract or medical chart on the document camera, and far end views during a video conference.

Pride says the programming of the system followed strict guidelines that TSI has helped the university work out over the past several years. “You can walk into any room in any part of campus and find the same look and feel to the user interface. Even though this space is more involved than most of their classrooms, any SLU instructor would be able to begin using it immediately.”

The touch screens include several courtroom modes, including one for a jury trial and another for appellate court discussions, plus a number of lecture modes (depending on the number of windows shown on the projectors) and a video conferencing mode. For the trial modes, Heidemann says, “We decided to route the output of the DVPHD through the annotation device to allow the users to add markups on top of multiple

evidence or presentation windows simultaneously. From the touch screen, they can easily toggle the annotation as an overlay.”

“One reason we have selected DigitalMedia for every installation we’ve done for the last three or four years is that we only have the budget to touch a space once every seven,” Williams explains. “As technology changes, we expect to switch out projectors, monitors and other components, but we won’t have to replace our DM switchers or cable infrastructure, which keeps our budget number down.”

“We’re also very impressed with the reliability of the product, its cost, and how easy it is to integrate. Since we do some of our own programming, we know the Crestron system is one of easiest to handle,” Williams adds.

With the new law school building in use since the start of the fall term, Williams says the entire staff and student body is impressed. “Everyone loves it. We’ve definitely met all our goals for the new spaces.”

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Builder
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Architect
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