



## The Applications Are Endless

### University of Toledo, College of Engineering

#### STUDENTS:

Offers 6 undergraduate bachelor of science degrees in engineering, 4 bachelor of science degrees in engineering technology, as well as distance education.

#### LOCATION:

Toledo, Ohio

#### Challenges

- AV equipment complicated, dated and failing
- Lack of future compatibility

#### Key Results

- Savings of more than \$40,000 in hardware
- Operational savings with reduced support calls
- Eliminated the need to over-buy or re-buy hardware

#### Background

The College of Engineering at the University of Toledo partners with another college to offer a distance learning program. The colleges 'connect' two classrooms electronically. The instructor may deliver a lecture from either location, share content like slides or video, and all the students are able to communicate and collaborate together in real-time. When the program originated in 2004, students in the remote location could actively participate in classroom discussion with the instructor and other students simply by pressing a button. The button would cue the instructor someone wanted to participate, the microphone would go live, and the video camera would be signaled to focus on that individual.

#### Problem

Even with regular maintenance, technology like this starts to fail. With its somewhat complex configuration, the equipment racks and cabling were dense and complicated, so much so that it became challenging to find an integrator or programmer that would even work on it. "We knew we needed some kind of control interface and we knew we needed to think about compatibility for the future and how to make that continue to work as technology changed," Jonathan Rethorn, High Performance Computing Specialist indicated.

#### Solution

They had identified their functional requirements and video was part of those requirements, but they were really concerned about over-buying or re-buying when it came to the hardware. "Another hardware-based solution would leave the college in the same situation again in the future—we just didn't know how long that would be," said Rethorn. The desire was to go with a software-based solution to allow for future flexibility, but they didn't really know how to accomplish that.

The College of Engineering was familiar with Utelogy because it was being used elsewhere at the college so they approached Utelogy about the possibility of deploying their distance education solution using AV over IP.

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**TOLEDO**  
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Utelogy delivered a conceptual design, put together a bid specification and ultimately worked with ProVideo Systems to perform the integration and commissioning of the room. The College of Engineering was able to deploy a solution where the software executes the commands to control the hardware and tell it what to do.

### Outcome

The College of Engineering was able to reinstate its real-time audio and visual participation in its distance learning program. "Utelogy made this easy and affordable to do," said Rethorn. This software based solution resulted in a savings of more than \$40,000 that would have been required to purchase the hardware for control and swap out some other hardware that was no longer compatible. Not only did the solution provide capital savings, it's also resulted in operational savings as it doesn't require nearly as many support calls.

"We feel the solution has helped us to be on the leading edge and given us a solution for the future. There are some capabilities we don't have today, like lecture capture, but because we're using a software solution, we can implement that and other pieces whenever we want," Rethorn added.