A Four Year University Simulation Center - Provo, Utah

A CASE STUDY BY LEVEL 3 AUDIOVISUAL INFO@L3AV.COM | (480) 892-1071 | LEVEL3AV.COM **WATCH VIDEO**

SIMULATION CENTER

Level 3 Audiovisual successfully implemented SIMStation into a four-year University Simulation Center in Provo, Utah. This center was a retrofit from an existing AV system, and Level 3 Audiovisual was brought in to add a new dimension of user feedback, as well as, provide the newest technology the industry has to offer.

This Simulation Center includes a total of seventeen rooms. Six simulation rooms for capturing and using manikins, five standardized patients or OSCE exam rooms, six control stations in a centralized control room, as well as, six debriefing rooms where participants can watch the event live or playback for review, after completion.

This Simulation Center is utilizing Level 3 Audiovisual's newest web-based software interface, allowing for the seamless integration between patient exam rooms and simulation training rooms while also providing flexibility for access anywhere in the center through their network. A tablet version of SIMStation was integrated by the Level 3 Audiovisual team, allowing for annotations, bookmarks, and making the software readily available for debriefing.



The L3AV team brought over 23 years of experience and, with the help of their in-house subject matter experts, was able to design a state-of-the-art facility complete with high definition PTZ cameras, wireless microphones, full tablet connectivity, mannequin control, vital sign capture, and voice modulation devices, which allow for educators to change the voice of a mannequin to be a man, woman, child, or create a completely new voice. With this solution, the university was able to greatly improve their workflow management and increase their technology capabilities for years to come.

CONTROL STATIONS

Each control space shall consist of a touch PC to run SIMStation software and control cameras and source selection. Two desktop microphones shall be provided allowing an operator to speak to the simulation room, a confidant via their earbuds, or VOP. Desktop speakers are provided as well as three headphone ports for discrete listening. A tablet is available for each station to remotely add notes to simulations. Each control station will include a telephone capture device. A voice changer device will be included for each control station. This will allow for voice modification to the connected room.



DEBRIEFING ROOMS

Each debriefing space is equipped with a client provided display to allow participants to view the debriefing software. Inputs to the display are the debriefing PC by default. Each debriefing space will consist of one PTZ camera with optical zoom. Debriefing room 1 will consist of two PTZ cameras with optical zoom. This will be controlled via the provided tablet or wireless mouse/keyboard. An HDMI input plate is also provided for each room for auxiliary input sources. This will automatically take over the debriefing PC when plugged in. Ceiling speakers are provided to cover the entire room evenly with audio.



OPEN BED LABS

The open bed labs consist of two PTZ cameras with optical zoom. Each lab has a single ceiling microphone and a ceiling speaker for communication from control space.

SIMULATION ROOMS

Each simulation room consists of two PTZ cameras with zoom, two encoders for capturing vital signals or other compatible video devices and includes a single ceiling microphone and a ceiling speaker for communication from control space. Each room will use an OFE speaker wall plate for connecting a portable speaker for in-room Voice of Patient (VOP), and one wireless microphone. The wireless microphone can also be used for private communication between the control room and the simulation room.



EXAM ROOMS

Exam rooms each include two PTZ cameras with optical zoom, a single ceiling microphone and a ceiling speaker for communication from control space, an OFE speaker wall plate for connecting a portable speaker for in-room Voice of Patient (VOP), and one wireless microphone. The wireless microphone can also be used for private communication between the control room and the exam room.



MED STATION

The med station in the hallway shall consist of four PTZ cameras with optical zoom, one ceiling speaker and one ceiling microphone for communication from control space.

TRAINING ROOMS

Each room is equipped with a client provided display to allow for live viewing of the training rooms. Wet room 1 shall consist of two PTZ cameras with optical zoom. Each room includes a single ceiling microphone and a single ceiling speaker for communication from control space.



HEAD END SYSTEM

The head end system shall consist of a server-grade PC to transcode video, audio, and act as a central storage device for an interim period. All IP switches and audio processing shall also be housed at this head end rack. A rack is provided, but equipment can be integrated into an existing IT rack if enough space is available. Central network location to be determined later.

PULSE IDM

Pulse IDM was included to monitor the simulation system. With Pulse IDM in place, Level 3 can oversee all the technology installed to ensure it is working properly. If something should go wrong, they will be alerted and can remote in and fix the issue immediatley. They utilize TeamViewer to securely connect to your simulation computers for any configuration changes or system repairs.





For more information about Level 3 Audiovisual, it's team members and it's extraordinary service and support to enterprise level clients, please contact info@L3AV.com or phone us at (480) 892-1071