



lobby monitors



facility control



digital signage solutions

The Challenge

Known for its quality, innovation and industry leading service and support, APC has received multiple awards and public recognition for its achievements. It's not a surprise then, that APC would turn to Innovative Technology Group (ITG) to design and install their facility audiovisual solutions when they built the new Schneider Electric Technology Center in St. Louis. ITG, a company that builds its own foundation on its commitment to customer satisfaction and innovative technology solutions, was brought in right from the start. The new facility required a variety of technology solutions from the videoconferencing suite in the executive briefing center (EBC), to the training rooms, breakout rooms, NOC display, lobby monitors, digital signage and facility zoned audio.

Midway through the project, Schneider Electric bought APC. With a change in scope and key contacts, ITG had to refocus

direction to keep the project on track, while still meeting the new owners' expectations and budget restraints. Tasks such as construction drawings and project timelines had to be revised and coincide with a new scope and construction timeline. "We updated construction drawings and proposals a number of times, but these changes were not as much a concern to us as maintaining the cost versus performance issue for APC," explains George Brosie, Director of Engineering for ITG. "With this change in scope, we also had to give them a foundation of what they would need for APC's long-term technology strategy. As a result, we have a conduit infrastructure in place and pipes installed for future expansion to reduce the amount of money and time it would take for reconstruction in the future."

The Executive Briefing Center

The executive briefing center (EBC) was designed as a premier conference room for APC's executives and clients. With a high

definition Tandberg videoconferencing system, people use the room for business applications as well as for recording presentations and content on the projection screen. Using the precision HD cameras and recorders, Executives can record the presenter and create an effective training or presentation video.

The room itself contains a unique, horse shoe shaped table that was designed to match the drywall soffit in the ceiling. For each seat around the table, there is a pop-up box and microphone. The microphones in the table are used for teleconferencing, videoconferencing and voice reinforcement in the room. ITG played a major role in this table-build and worked with the Architects to ensure that the seating, VGA, data, and power boxes were in direct line with the mics. Explains Mr. Brosie, "The speakers had to match precisely where the table and mics were placed in order to create a mix minus system. As a result, every time the table or furniture plan changed,

we had to change our speaker pattern in the ceiling.” A mix minus audio system provides the best quality of audio with no feedback.

At the front of the room is a rear projection screen with a custom-built projection enclosure. This was a significant challenge because the original projection room was triangular-shaped which was not conducive to the placement of a door. This meant that everything would be exposed, which is not what APC wanted. To fix this, ITG designed a custom-built, self-contained, slide out projection mount frame. “This was an intensive project,” explains George, “It involved the development of drawings for the Architect so that he could determine how high off the floor the screen was going to be in order to match up the wood and panel trim all the way around the room.”

Large Training Room

The large training room is a divisible room that can be used as two stand-alone rooms or combined. Dual screen and projection systems are set up to work together or separately. ITG was responsible for designing each of the podiums, core drilling for computer connectivity, and designing audio and video over cat five to minimize the amount of connectivity in the floor. The major obstacle in the design of this room was finding a location for all of the AV equipment because it did not fit in the podiums. As a result, the main rack has been placed down the hall in their central telcom room.

Digital Signage System

The digital signage system consists of 5 LCD's lining the lobby and 2 LCD's hanging behind the reception desk that can display satellite or computer images. Using Magic Net as their media transmission system, APC can create corporate messaging that is generated from a server and controlled through the facility's e-control system. Magic Net is a unique digital signage application developed by Samsung, the first manufacture to produce an embedded signage application within their LCD's. This means that each monitor has an embedded CPU. Employees can push information to the monitor and schedule its playback, instantaneously, from their network.

7 Audio Zones

The lobby, atrium, upstairs lounge, breakout hallway, outside patio, vestibule, and bathrooms all have the ability to play satellite music or the corporate CD player - all controlled by e-control. Staff can change channels, CD's and manage independent volume control for 4 of the 7 zones. The biggest challenge in designing the audio zones was finding the right speakers for the atrium that could be mounted in a room with no ceiling.

The atrium is open to the roof of the 2nd floor. ITG had to find a special way to install the speakers. The ceiling tiles were paper-covered fiberglass that wouldn't hold a speaker because they would sag and break through. Because they were not traditional tile pieces, ITG had to find products that were not only up to code, but also aesthetically pleasing and unobtrusive to the style of the atrium.

The Results

As a supplier of audio visual power equipment and racks, APC product was incorporated into every aspect of the technology designed by ITG. Power, racks, and sources were all integrated with the AV equipment to create a facility-wide design met to the expectations and standards of the client. As a result, APC has a state-of-the-art facility that improves the effectiveness and productivity of their employees. ITG's goal was to assist APC in facilitating their own mission of providing “rapid delivery of innovative solutions to real customer problems.” Sounds like they're right on track.



large training room



noc display

