

Integrated building control systems help in efforts to become more green and sustainable

March 07, 2011 - Design / Build

The advent of the converged network has allowed businesses to enjoy efficiencies and cost savings by running voice, data, and video applications over one centralized network infrastructure. Phone systems, video conferencing, video surveillance, and building access control are just a few of the technologies that were "standalone" not very long ago. These applications used to run over completely separate cabling systems with hardware and software environments that required complex integrations through multiple vendors to facilitate communication with each other. Now it is not uncommon for qualified integrators to install voice, data, and video converged networks "out of the box" and then seamlessly add security and access applications to the powerful new system.

When it comes to adding full-scale building controls to the converged network, the eagle has landed. Pioneers like New Jersey based Crestron Electronics have developed control systems that eliminate the inefficiencies, costs and hassles of monitoring many disparate systems from different platforms. Through seamless integration of control systems, scalable commercial lighting systems, and software, Crestron's Integrated Building Technology (IBT) connects every room and every building. With the Integrated Building Technology system, end users can intuitively manage, monitor, and schedule every environmental and audio/video system from any touch screen, web browser, or mobile device for peak performance and optimal energy savings.

AV and Room Scheduling

Integrated building control solutions can not only tell you when rooms are being used, but also how they're being used. Features such as "intelligent room scheduling" make sure the right rooms with the right resources are used, for maximum productivity and efficiency. Touch panels can be integrated with Microsoft Outlook to provide a familiar interface to schedule a room. When a meeting is scheduled, the room automatically "wakes up" prior to the start of the presentation. After the meeting concludes, occupancy sensors detect when the room has been vacated and automatically power off devices.

Energy Monitoring

and Management

Control systems such as Crestron's IBT offer complete building management for maximum energy and operational efficiency. With IBT, users can monitor, manage, and control all the technology throughout the entire facility both centrally and globally. The system provides total environmental control to conserve energy and lower costs by combining automated dimming and daylight harvesting with power switching and load shedding. Touch panels and computer interfaces offer global management of all systems and devices building-wide from a centralized command center, or local control in each room.

Manage Lighting Systems

Lighting control in modern commercial buildings is increasingly complex, balancing a variety of requirements such as life safety, energy conservation, comfort, productivity and aesthetics. The need to monitor, manage and control disparate lighting systems such as emergency, task, presentation, architectural and natural light simply and efficiently on a single platform is extremely important.

IBT provides efficient and scalable solutions for centralized and distributed commercial lighting systems. Lighting and shade control can be integrated with HVAC, security, audio/video distribution and multimedia presentation. Graphic touch panels, custom keypads and computer control interfaces deliver a full view of lighting levels, temperature and shade positions in every room. Users can monitor and track current and historical energy consumption and cost savings, and intelligently manage building resources.

Integrated building control systems, running on the IP network, can be designed for all types of environments including convention centers, office buildings, hotels, schools, and sports arenas. These technologies allow us to take full advantage of the power of the converged network while helping us in our efforts to become more green and sustainable.

For more information about Integrated Building Technology, visit www.crestron.com.

Layne Frank is director of sales for BBH Solutions, Inc., New York, N.Y.

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540