T.E.C. News Quarterly

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PRADA Moves In With Style

Renowned Italian fashion designer PRADA has come to New York and occupied the seven-floor building at 609 W51st Street in midtown Manhattan and the Soho location at 575 Broadway. In renovating their two NYC facilities, their corporate midtown site, and their retail Soho site, PRADA's appeal for the modern extended itself into the technological implementation of the best in Building Automation Systems.

In the selection of T.E.C. Systems Inc., as the controls contractor for the implemented design and installation of the sites' BAS, both at midtown and Soho, PRADA's prestigious taste was in no way undermined.

PRADA's Soho and midtown locations (from top to bottom).

Utilizing a BACnet open communications protocol which allows the various mechanical systems to share information seamlessly and combined with Honeywell's latest Graphical User Interface, SymmetrE®, T.E.C. Systems Inc. provided an efficient Honeywell Excel 5000 Building Management and Automation System.

SymmetrE's® web accessibility feature will allow facility managers to access the system unlimitedly both by intranet and Internet with full LAN/WAN capabilities through conventional web browsers. The system encompasses building maintenance features such as:

- Global scheduling
- Alarm Paging
- Integrated Maintenance Manager
- Phone control

With an Ethernet communications backbone, the system carries BACnet messages between the SymmetrE® Graphical User Interface and the various implemented sub-systems which consist of Trane fan coils units, Liebert package AC units, Mammoth air handlers, and TechAir chillers. The design and integration supplies both facilities with an elite design that serves the customer's optimum demand.

Keeping in mind that quality workmanship is what separates the choice designers from the mainstream, the inherent parallelism is recognized. T.E.C.'s ability to integrate various systems with diligent and excelling designs becomes akin to PRADA's own distinguished expertise ■

Inside this issue:

We specialize in:

- HVAC SYSTEM CONTROLS
- OPEN/INTEROPERABLE TECHNOLOGY
- SYSTEMS INTEGRATION
- FIRE/SMOKE CONTROLS

Owner/Developer: Prada
Engineer: Ove Arup & Partners (Soho location) HLW International LLP (Midtown location)
Mechanical Contractor: Botto Mechanical Corp. (Soho/Midtown locations)

Take A Look at Our New Look!

T.E.C. Systems Inc. is launching its newly designed web site for the New Year and encourages its clients and associates to browse through and re-discover what T.E.C has to offer. The new design includes an expansion of the current site that includes a newly developed newsletter archives as well as information on T.E.C.'s involvement in the open systems integration field.

At the site, one can find a corporate profile that gives an in-depth review of the company's history and work scope, as well as a service page and a promotional case studies page that includes the company's most current and prized projects with links to the corresponding detailed case studies.

The website also, provides product briefs with relevant product site linking to better serve client needs, featuring products from Honeywell, American Auto-Matrix and Echelon. The member's area, currently under development, will give visitors access to individual project information and tools that will aid in the cost estimation of facility controls design and implementation.

Come and take a look at: www.tec-system.com.

T.E.C. Systems Inc. is a complete service, Long Island City based, automation controls contractor. Specializing in the design and implementation of Computerized Building Automation Systems, T.E.C. has completed thousands of successful control implementations in commercial, industrial, residential, and institutional facilities. Recently, T.E.C. Systems Inc. has been pioneering the Open System Integration technologies, utilizing LonWorks and BACnet. Staffed with professional design, installation, software, and service engineers, T.E.C. can produce turnkey automation systems for all control system needs. Visit us at www.tec-system.com to learn more about what T.E.C. can do for you.

What's New?

College Life in Downtown Brooklyn – Polytechnic University is undergoing its ambitious plans for changing the face of its campus in the heart of the MetroTech Center in downtown Brooklyn. The University is currently constructing its first dormitory, which will allow the former commuter school to expand student recruiting nationwide. A Honeywell XL5000 DDC control system, installed by T.E.C. Systems Inc., under a subcontract to Mandell Mechanical, shall control all HVAC and smoke control functions in this 20-story, 440-bed dormitory facility. The project, designed by Jaros Baum & Bolles Consulting Engineers and being managed by J.A. Jones Construction Group of New York will be ready for occupancy by July 2002.

Teaming up Again – The team of AKF Engineers, JDP Mechanical and T.E.C. Systems Inc., lead by ConEdison Solutions will once again be combining forces to deliver a cost-effective energy-saving solution. An 1800-ton chiller plant retrofit at St. Vincent's hospital is the target of this energy savings project. Design and installation of natural gas engine driven chillers, variable frequency pumping and high efficiency cooling towers will provide energy efficient prime movers. A LonWorks Open Protocol control system, designed and installed by T.E.C. Systems Inc., will monitor and optimize plant operation.

Rockefeller University Expands System – T.E.C. Systems Inc. has been awarded the control system expansion project at Rockefeller University's campus located in midtown Manhattan. The campus-wide American Auto-Matrix control system has been steadily growing since its inception in the mid '80s. This latest project includes monitoring and control of the expanded central chilled water plant. Two new 1500-ton high pressure steam absorption chillers, along with associated pumping and piping, designed by Jaros Baum & Bolles Consulting Engineers, are being installed by Grundman Mechanical. The Auto-Matrix DDC control system will be fully integrated with the campus wide network. Construction management for the project is being handled by Turner Construction.

UNDERSTANDING INTEROPERABILITY "Snivits and Skipits"

Interoperability – "*the ability of software and hardware on multiple machines from multiple vendors to communicate"*- a definition that's pretty easy to understand but not so easy to accomplish. Much like when we communicate with our peers, many factors must be taken into consideration so information can be shared between us. Do we have a connection: phone, e-mail, face-to-face conversation? Do we speak the same language: German, English, Russian? Do we have the same vocabulary? In our every day lives, it's this level of detail which allow us to become effective communicators. The same is true for system interoperability.

To accomplish this effective level of communication for LonWorks based control systems, the LonMark association has developed the Standard Network Variable Type (SNVT) and the Standard Configuration Property Type (SCPT).

Standard Network Variable Types (SNVTs) facilitate interoperability by providing a well-defined interface for communication between different manufacturer devices (nodes), connected to the same network. A node may be installed on a network and logically connected to other nodes via network variables as long as the data types match. A list of all the available SNVTs and details of their definitions is provided in the SNVT Master List.

Standard Configuration Property Types (SCPTs) facilitate interoperability by providing a well-defined compact mechanism for handling large amounts of configuration information on a node. SCPTs do not use up network variable resources and are downloaded and uploaded to a node via the LonTalk file transfer protocol or by network management read/write messages. A list of all available SCPTs and details of their definitions is provided in the SCPT Master List.

The SNVT and SCPT Master lists define the vocabulary of LonWorks based systems and much like our own language continuously evolve to better suit our needs. These master lists can be obtained from the LonMark Associations website; www.lonmark.org as part of the LonMark Resource Files download.

Understanding the vocabulary of control system components is an important step in assuring the success of system interoperability. Become multilingual. Understand your SNVTs and SCPTs■

A Reputation Built on New York's Best

This impressing façade has been gracing 5th Ave. for over 100 years.

One of New York City's most valuable cultural institutions, the New York Public Library system has serviced the city for over 100 years. Established in 1885, it continues to provide information as well as a variety of cultural and educational programs. To preserve the books, manuscripts, and film they hold within the library's facilities requires the most advanced developments in climate and humidity control.

The New York Public Library has maintained a long-standing relationship with T.E.C. Systems Inc. since the company's establishment in 1983. That year T.E.C. sold its first DDC system to the New York Public Library, its first major client. This internally-produced, board-level, integrated controls system had the ability to monitor and control a branch via built-in modem. The controls were custom-designed to control a branch's temperature and humidity. These functions were accessible at each branch and gave the NYPL maintenance personnel the ability to call from the central station at 42nd Street main branch to determine the actual conditions at individual branches. For that time, this accomplishment was unbelievable.

The NYPL selected T.E.C. as its controls contractor for the historical exhibit of the Dead Sea Scrolls in 1993 at the NYPL's Gottesman Hall. T.E.C. designed and installed a critical space DDC system to preserve the 2000+ year-old ancient Jewish documents during the exhibition. Exact control of air space temperature and humidity were required to protect the fragile and valuable archeological documents.

Currently, T.E.C. Systems Inc. is working on the main branch's renovation of its south court and penthouse quarters, which includes installation of: air handling units, fan

NYPL's never-ending book shelves need climate control for their preservation.

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A Reputation built on new york's best (cont.)

coil units, hot water systems, and hot water reheat systems. T.E.C. Systems Inc. also currently holds a continuing contract with the New York Public Library and its sub-branches that includes: preventive maintenance, on-line service, 24-hr emergency service, training for facility management staff, repair and replacement of failed parts.

From the very first project, T.E.C. has maintained an outstanding rapport with the New York Public Library. T.E.C.'s work for the NYPL includes over 40 jobs done around the city for their branches and resource centers. This long-standing relationship is based on T.E.C.'s reputable and consistent reliability reflected in its services and designs, complementing the NYPL's inherent need to maintain optimal climate control for the preservation of its books and exhibits. For both the NYPL and T.E.C. Systems Inc. this is a match made in 'contractor's heaven' ■

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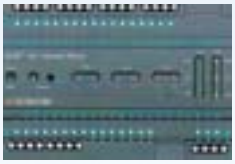
In the Spotlight

i.Lon 10

Echelon Corporation has released their newest set of products to provide control system and Internet connectivity. The i.LON 10 Ethernet Adaptor and i.LON 100 Internet Server are two low-cost, high-performance interfaces that connect LonWorks-based everyday devices to the Internet, a LAN, or a WAN. Utilizing a standard Web browser, homeowners, property managers, and maintenance technicians can easily monitor and control any device connected to the network.



i.Lon 100

While the i.LON 10's primary strength is that it provides remote monitoring capabilities for both twisted pair and power line carrier field networks, the i.LON 100 also includes built in scheduling, data logging, and alarm management functions, along with on-board I/O. Compatibility with most standards based protocols, including TCP, PPP, NAT, DHCP, ICMP, SMTP, DNS, HTML, XML and SOAP allows for easy connectivity with the most popular IP networks.