What is oBIX?

oBIX stands for Open Building Information eXchange, and it is an industry-wide initiative in to define XML- and Web Services-based mechanisms to Building Control Systems. oBIX will instrument the control systems for the enterprise.

What do you mean by Building Control Systems?

Building controls are all the smart systems embedded in buildings, systems that have traditionally been obscured by proprietary control standards and arcane details. Examples of Building Control Systems include: Heating, Ventilation and Air Conditioning (HVAC), Elevators, Laboratory Equipment, Life/Safety systems, Access Control, Intruder Detection, A/V Event Management, CCTV Monitoring, and many others.

oBIX also extends to non-control system sensing, providing real-time access to sensors include Environmental Sensing, Electrical Panels, Power Meters as well as other Utility Meters, anything that measures or monitors the physical space in a facility

Why is oBIX important?

When we instrument control systems using an IT standard like Web Services, we enable the largest assets of the enterprise, its facilities, to be fully available to the business management of the enterprise.

What do you mean by "Instrument the Control Systems"?

By way of analogy, think of your car. The control system of my manual transmission VTEK sedan is quite different from my wife's automatic transmission minivan. In neither car do I, the operator, really want to know what the different control systems in the two cars are, nor do I want to know how the injection and carburetion decisions really change at different speeds under VTEK.

Instead, we have instruments: Speedometer, Fuel level, Engine Temperature, Warning lights. Some cars have additional instruments such as a Tachometer and an Oil Gauge, and perhaps even Cruising Range. With these instruments, I can drive a car without knowing anything about its control system.

Where did oBIX come from?

The Continetal Automated Buldings Association (CABA) creating a committee in April 2003 at BuilConn in Dallas, TX, and this committee - the XML/Web Services Guideline Committee - started the work that is now known as oBIX. oBIX has its roots in the Building Controls industry.

How does oBIX relate to control protocols such as LONMARK® and BACnet®?

While many debate the strengths and weaknesses of LONMARK and BACnet, it is clear that neither one was designed for the Internet. Both appeared on the scene in

the early to mid 90's when the significance of the Internet to buildings was not as profound as it is today. oBIX is working with both LONMARK and BACnet groups to enable oBIX to be THE vehicle that their systems can be taken to the TCP/IP layer in a consistent manner, a vehicle that can also be integrated with legacy/proprietary systems as well as future "native" TCP/IP control systems.

Is oBIX useful for systems integration?

Yes, for integration of systems and the ability for the systems to provide relevant data to enterprise systems that many corporations now have.

Explain the relevance of buildings and HVAC to the Enterprise.

Enterprise systems are making a huge impact on corporations and other types of non-profit organizations including business financial systems, CRM (customer relationship management), human resources, and supply chain management. Companies like SAP, Oracle, IBM as well as the consulting groups such as EDS are providing integration services to make organizations very efficient. Buildings and facilities are now a significant area for organizations to include in such enterprise systems; corporations now appreciate that the effectiveness of their facilities can make a huge difference to their bottom line.

There is currently no easy way for IT departments-whose responsibility it is to make all this happen-to integrate their systems with the systems that run, manage and monitor their buildings and facilities. What's important to note is that this has to be done on the IT department's terms using their language, rules, standards and tools, and XML and Web Services have been created specifically to solve this kind of problem. oBIX is an initiative to use these technologies for building systems, and the IT folk will be very happy about this.

Give me examples of how buildings and enterprise need to be connected.

Campus scheduling is a clear example. A system that can reserve a meeting room can automatically schedule the environmental, lighting and security systems to adjust themselves on the basis of knowing when the room will be in use, and all this information is tied into the corporate scheduling, telephone conference, A/V resources and so on. Another great example would be multi-unit businesses such as fast-food establishments, banks, etc. These building types have a need to provide energy usage at the month's end to the enterprise systems monitoring the profitability of each and all units, or maybe even correlate the level of business to weather conditions outside and inside each retail unit.