IP Video Surveillance, Business Ethics & ATCA
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IP Video Surveillance

On March 12th Alan Weissberger attended a seminar on **IP Video Solutions** from Industrial Video Control Corp (IV &C). Scalable **IP video surveillance systems** for various applications were described. The applications included; industrial security, marine and maritime surveillance, traffic monitoring, water works and other remote monitoring, homeland security, and surveillance of public buildings- including schools, hospitals, and prisons.

IP video solutions were said to be more flexible than analog video, easier and cheaper to scale, standards based (thereby eliminating proprietary hardware and ensuring some level of vendor inter-operability), possibility of using existing IP corporate network if traffic engineering validates integration of real time digital video from multiple IP cameras with legacy best effort data traffic.

Things to consider for a video surveillance solution include:

- Analysis of application requirements: including video quality, bandwidth, resolution, frame rate, compression type (motion JPEG, MPEG2, MPEG4)
- Camera placement: field of view, distance, size of object, mounting options, available power, environmental considerations
- Storage requirements: including network attached storage and storage area networks for archival video storage
- Operator interface: for video presentation and controls

Cameras are network devices with either wireless or wireline interfaces. With wireless networks, like the one from partner Trango Wireless Broadband, cameras can be placed almost anywhere. In addition to wireless connectivity, cameras may connect to 10/100 Base T (<24 cameras) or 1 Gig Ethernet over fiber (24 to over 100 cameras). If there are many cameras, it is recommended to use a self-contained fiber based IP network for the video traffic, to ensure good QOS. Analog cameras could be used on such a network, but they must be converted to digital at the node via a video server.

Because it uses IP video, IV & C is able to deliver systems using an open architecture, with Common Off The Shelf (COTS) hardware.The three components of Industrial Video Control's IP Video Sytem are: **cameras, Relay Server software, and View Station software.**

Optional accessories include; media converters, camera lenses, IR.11 monitors, and Power over Ethernet.

Additional information on their products can be obtained by contacting Clarke Esler of IV &C: cesler@ivcco.com

Business Ethics

Last week, I was an invited guest at Santa Clara University's prestigious **Business Ethics Conference on India and China.** The three-day conference explored the cultural, economic, and social factors that form the ethical business practices in these countries and the challenges facing global business organizations in creating a consistent and effective ethical culture capable of crossing national boundaries.

There were several key talks from scholars and business leaders (from India and China) that provided insight into the decision making process of non government organizations and state run companies. The business culture in those countries is influenced largely by historical religious views, particularly in China (Daoism, Confucianism, and Buddhism). Thursday afternoon was spent at Cisco Systems where their Sr VP/corporate council and top-level managers provided an insight into how Cisco does business in developing countries.

For an agenda of the Conference, please go to:

http://www.scu.edu/ethics/practicing/focusareas/business/conference/2007/

ATCA

Advanced Telecom Computing Architecture (ATCA) is a new series of industry standard specifications for components and sub-systems to be used in next generation carrier grade communications equipment. Instead of all the proprietary card and chasis interconnects, the objective here is to provide a common platform for high-availability telecom and computing applications. The development and implementation of ATCA and related standards- **Advanced Mezzanine Card** (AMC), and **MicroTCA-** is continuing at a rapid pace.

On March 7th, I attended a full day Light Reading seminar on **ATCA, AMC, & MicroTCA 2007: Moving to Deployment.** The agenda may be accessed at:

http://www.lightreading.com/live/event_information.asp?survey_id=289&p_id=conf

These technologies are shifting from development to widespread deployment in applications like IP Multimedia Subsystem (IMS), IPTV, VoIP, Multimedia Internet surfing, 1/10Gig Ethernet switching and blade servers. New eco systems and supply chains are taking shape. Several standards organizations and vendor consortiums are involved in this effort. These include: PCI Industrial Computers Manufacturers Group (PICMG), Service Availability Forum (SAF), SCOPE Alliance, and (interoperability criteria) from CP-TA.

Please contact Alan directly if you are interested in a consulting arrangement to learn more about the Light Reading seminar or to apply these standards and technologies to your applications. He can be reached at 408 247 9102 or alan@viodi.com.