

ASHRAE Ottawa Valley Chapter

Chapter Meeting # 3 November Approved



Meeting Date:	Tuesday November 20, 2001
Location:	Capone's Restaurant, 1701 Woodroffe Avenue, Nepean
Presiding Officer:	President Frank Bann
Attendance:	Total: 116 Guests: 2 Students: 0
Theme Night:	TEGA
Technical Session:	Seminar/Trade Show on Interoperability
Table Top:	See Below
Program:	Panel Discussion on Controls and System Interoperability
Prepared by:	Jason MacMurdo – November 26, 2001

Seminar Trade Show (10:00 – 12:30)

- Presentation on *Open and Interoperable Systems* by Ahmed Hirani, Vice President of Sales and Marketing for Base Controls.
- Presentation on *Open Systems and Standards* by Avi Baidya, Manager of Interoperable Systems Marketing for Trane Building Automation Systems.
- Attendance: 143

Lunch (12:30 – 1:30)

Seminar Trade Show (1:30 – 3:00)

- Presentation on *Keeping Options Open using Open Systems* by Chris Hollinger, Product Manager, Integrated Systems for Siemens Building Technologies.
- Presentation on *Specifying for Interoperability* by Terry Hoffman, Global Products Marketing Manger for Johnson Controls.
- Attendance: 143

Afternoon Breakout Sessions (3:00-5:00)

- Breakout session on KL International Airport, Simon English, Honeywell.
- Breakout session on Building Systems Network Infrastructure, Paul Minaker, CNS Consulting.
- Breakout session on BACnet Projects, Mario Patry, Regulvar Canada.
- Breakout session on the Internet and BAS, Fred Williams, DocuWeb Information Services.
- Breakout session on BACnet Systems, Rick Fellows, Alerton and Jean-Marc Dumontet, VCI Controls.
- Breakout session on LonTalk Projects, Crystal Controls.
- Breakout session on WEB Based Projects, Roy Samhaber, Duke Solutions.
- Attendance: 143

Social (5:00 – 6:30)

Business Session (6:30-7:10)

- President Frank Bann thanked all the control vendors, presenters and organizers of our Trade Show/Seminar on Interoperability. Attendance at the event was 143 . It was a great success.
- Frank Bann introduced the OVC 2001/2002 Executive and the Board of Governors.
- Cathy Godin introduced the guests.
- Frank Bann introduced our Past Presidents Mike Swayne and Joel Primeau to present ASHRAE Research Awards for the OV Year 2000-2001.

Dinner (7:10-8:10)

Evening Program (8:20-9:20)

- Evening program consisted of an open panel discussion between OVC and the 4 seminar presenters present at the trade show. Questions included specifying interoperability, BACnet .vs. LonTalk, the use of dedicated ethernet backbones etc...

Some highlights from the day....

Controls and System Interoperability

Interface Ability for products, not originally designed to work together, to share information.

Interoperate Ability for digital communication between products designed independently to the same communication standard.

Interchange Ability for multiple vendors' products to functionally replace each other on the same communication network.

The ultimate objective of interoperability will allow end-users and system integrators to purchase off the shelf devices from different manufacturers and achieve "plug and play" control systems.

The current trend of the control industry appears to be toward open systems. An open system must provide controls system options for an end-users' current needs as well as their future needs. Open systems should leverage many technologies and at the same time, should not force the end-user to be locked into one single communication protocol or one technology. An open system is not defined by a protocol but by its ability to interface with a wide variety of systems.

Specifying interoperable building controls systems is difficult. In order to specify integration, we must:

- Determine and understand the end-users' requirements and performance objectives.
- Select equipment, systems and standards necessary to achieve the objectives.
- Identify systems that will connect everything together.
- Evaluate choices based upon utility, price, function etc...
- Select the best architecture for the job.

BACnet .vs. LonTalk

- The BACnet protocol is a standardized set of rules that govern how DDC systems exchange information. It has a strong following in the engineering community. The BACnet communication protocol is an ASHRAE Standard and is updated through the activities of an ASHRAE Standing Committee.
- BACnet seems to be ideally suited to peer to peer communication at the network controller and OWS levels. It does not seem to be well accepted at the unit/terminal device control level.
- LonTalk is the open communication protocol used on a LonWork network to standardize communication. It defines a standard way for devices to exchange information.

LonWork devices are built around the Neuron chip which is a microprocessor based chip with the LonTalk protocol embedded in it. LonWorks is widely adopted by HVAC, lighting, fire and security equipment manufacturers. Tends to support a very flat control architecture and does not appear to be well suited for application at the large equipment, network or peer to peer level.

Meeting was adjourned at 9:30. Motion moved by Mike Swayne. Seconded by Joel Primeau. All in favor.

Distribution:

Board of Governors

All RVCs

DRC

Gabriel Laszlo

Please review the minutes. Any errors or omissions shall be communicated in writing to Jason MacMurdo.