

BACnet & Enterprise Connectivity

BACnet Web Services (addendum C)

APPROVED SEPT 2006

Bob Ofenstein
V.P. Products Group
Cimetrics Inc

ConnectivityWeek™

BACnet Member
Companies

SIEMENS

Reliable®
controls

AndoverControls

ALERTON®



TRANE®

It's Hard To Stop A Trane.®

Honeywell

Teletrol
Building Automation Technology



cimetrics™

AUTOMATEDLOGIC®
CORPORATION

McQuay®
International

Carrier

**JOHNSON
CONTROLS**

Delta™
C O N T R O L S

TEN
GROUPS

- **Applications**
- **Lighting Applications**
- **Life Safety and Security**
- **IP V6 Transition**
- **Objects and Services**
- **Utility Integration**
- **Network Security**
- **MS/TP Field Bus**
- **Wireless**
- **XML – Web Services**



BACnet / Web Services design session with participants from USA, Canada, Germany, Japan, Russia, England, and many more...

- Consensus on the XML mapping of all BACnet objects and properties. (BACnet XML file format)
- Consensus on XML based system configuration and troubleshooting tools (called "ePICS")
- BACnet/Web Services (Addendum C) which specifies:
 1. protocol neutral SOAP/XML definition and
 2. a mapping of the BACnet objects

- Identify Web Services use cases (16 identified)
- Identify “Actors” and “Services Required” for each
- Prioritize use case groups based on need and difficulty
- Define the scope of BACnet/WS version #1
- Design discussions – weekly conference calls + face to face meetings every quarter

- Automation Protocol independent
- Scalable from simple Client applications to full featured Enterprise applications
- Able to read and write to any point
- Support for multiple points and arrays
- Support for Trending suitable for immediate presentation
- Support for multiple languages and locales

- **Nodes** = Values + Attributes
- **Paths** = “/building 1/director office/temp”
- **Normalized Points** = any protocol
- **Localization** = date / time / numbers
- **Security** = password (required) or SSL
- **Sessions** = not required
- **Services** = enterprise read / write to building

READ
COMMANDS

- **getValue**
- **getValues**
- **getArray**
- **getArraySize**
- **getHistoryPeriodic**
- **getDefaultLocale**
- **getSupportedLocales**

- **setValue**
- **setValues**

WRITE
COMMANDS



**Standards
Testing**

+

**Interoperability
Testing**



Thank you !

