

US Army Corp of Engineers

**Utility Monitoring and Control Systems
Specification Review**

Indianapolis, IN

July 23, 2003

- Differences between LonWorks and BACnet
- Market Numbers
- Reasons for those number
- Recommendations

Differences between LonWorks and BACnet

1-9.1 Fundamentals

Chips: Single source availability vs. Real freedom of choice
Public company vs. Industries governing engineering body

1-9.5 LonMark vs. BTL

BACnet: Physical testing without “profile” limitations
LonWorks: Written assertion and missing profiles

Ch 2 Field Level Protocol vs. BAS Protocol

BACnet: Defined on all levels of a building automation system including IP
LonWorks: Field level network protocol

3-1.3 Definition of Schedules, Trends and Alarms

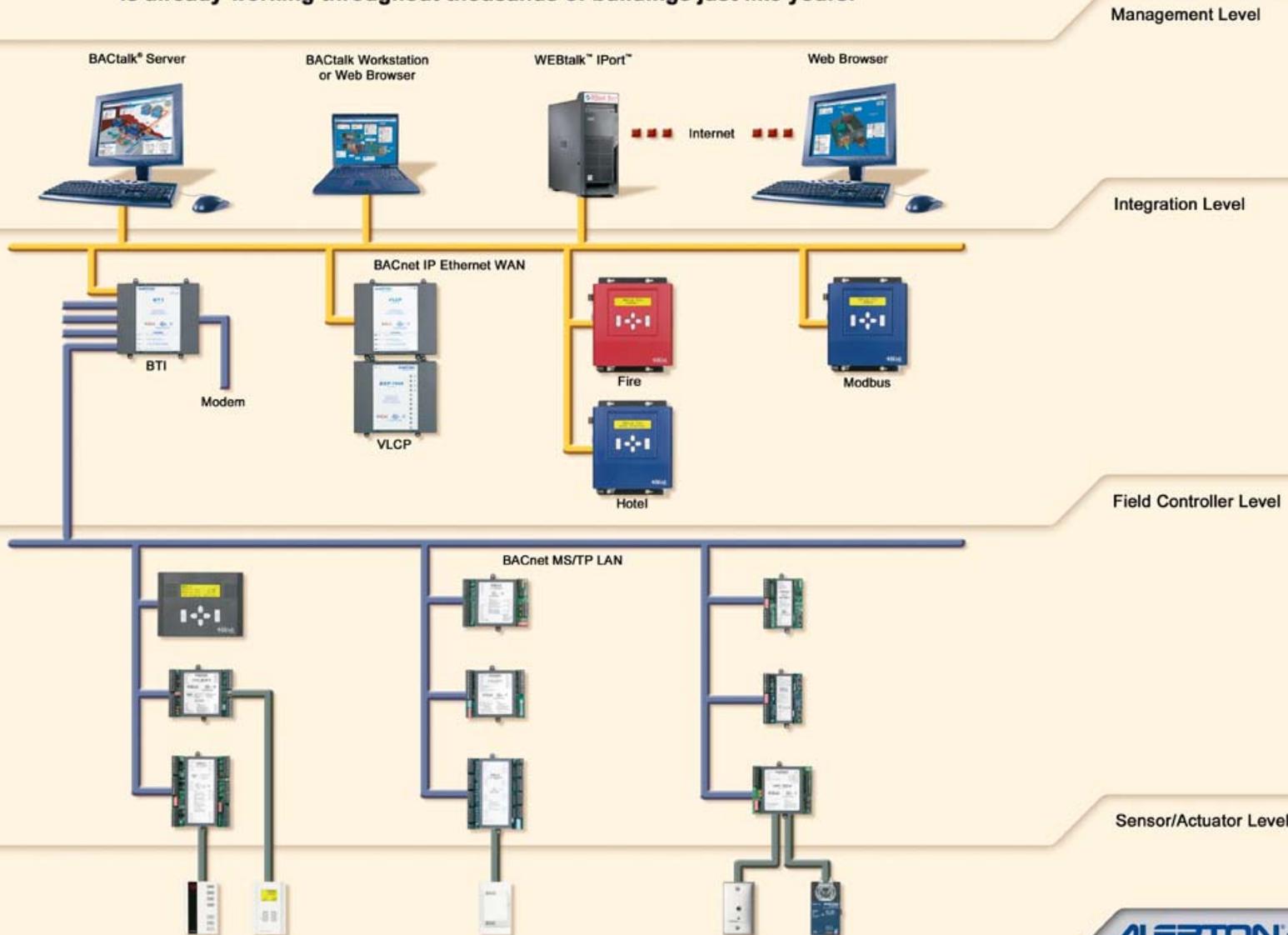
BACnet: Schedules and Alarms -1995, Trends – 2000
LonWorks: Schedule, Alarm and Trend profiles in process?
BACnet: Access Control and Fire Detection in process.

6-2.4.1 Master-Slave relationship

Just plain wrong
Masters and Slaves do interoperate through BACnet

Highly scalable from top to bottom

Alerton's 100% native BACnet® system
is already working throughout thousands of buildings just like yours.



The numbers speak for themselves

	Units (1000s)			Revenue (millions of \$US)		
	BACnet	LonWorks	BACnet advantage	BACnet	LonWorks	BACnet advantage
1998	145	44	+101	110.4	43.4	+67.0
2001	183 (26% increase)	58 (32% increase)	+125	231.4 (110% increase)	61.2 (41% increase)	+170.2
2008*	747 (308% increase)	90 (55% increase)	+657	648.1 (180% increase)	78.5 (28% increase)	+569.6

(Source: Frost & Sullivan, *North American Building Protocol Analysis*, 2001)

The reasons behind the numbers

- BACnet provides greater functionality, more advanced system capabilities as it is applied to a building automation system
- BACnet keeps pace with ever evolving needs of customers
- Convenience using customers own networking infrastructure

The reasons behind the numbers

- Broad product offering by so many manufacturers
 - Over 20 member companies in the BMA
 - Recently: Andover
- Vendor independence

Recommendations

- Research actual integrated systems performance
 - Visit installations utilizing multiple vendors equipment
 - Attend BIG-NA Annual Meeting
 - October 5-7 2003
 - <http://www.big-na.org/Conference2003.htm>
- Re-Evaluate the specification
 - new information available

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