ASHRAE Technical FAQ

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Question	What is BACnet?

Answer

BACnet stands for Building Automation and Control Networks. It is a communication protocol standard designed specifically to provide a way to integrate building control products made by different manufacturers. BACnet applies to products made for HVAC&R control, lighting control, fire and life safety systems, and other building automation functions.

ASHRAE Standard 135-2008 - BACnet - A Data Communication Protocol for Building Automation and Control Network

The purpose of BACnet is to define data communication services and protocols for computer equipment used for monitoring and control of HVAC&R and other building systems and to define, in addition, an abstract, object-oriented representation of information communicated between such equipment, thereby facilitating the application and use of digital control technology in buildings.

BACnet provides a comprehensive set of messages for conveying encoded binary, analog, and alphanumeric data between devices including, but not limited to:

(a) hardware binary input and output values,
(b) hardware analog input and output values,
(c) software binary and analog values,
(d) text string values,
(e) schedule information,
(f) alarm and event information,
(g) files, and
(h) control logic.

It models each building automation and control computer as a collection of data structures called objects, the properties of which represent various aspects of the hardware, software, and operation of the device. These objects provide a means of identifying and accessing information without requiring knowledge of the details of the device's internal design or configuration.

Tutorial and other information about BACnet can be found at www.BACnet.org

The standard and the other publications on controls may be purchased and downloaded on-line at our website, www.ashrae.org or by calling 1-800-527-4723 in the USA and Canada or 1-404-636-8400 worldwide.

ASHRAE Pubs	ASHRAE Standard 135-2008 - BACnet - A Data Communication Protocol for Building Automation and Control Network

Topic References	Controls, Network, Data Communication Protocol, Building Automation

	Cognizant ASHRAE Committees	Refer to Organization
1	TC 1.4	
2	SSPC 135	
3		
4		
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