ASHRAE Technical FAQ

ID 51

Question What is BACnet?

BACnet stands for Building Automation and Control Networks. It is communication protocol designed for the built environment to provide a platform to integrate building control products and services made by different manufacturers. BACnet is used in products made for building systems including, but not limited to, HVAC&R control, lighting control, fire and life safety systems, and access control.

<u>ASHRAE Standard 135-2016</u> - BACnet - A Data Communication Protocol for Building Automation and Control Network

BACnet defines an interoperable data communication protocol for equipment that can used for the monitoring and control of building systems. The standard defines an abstract, object-oriented representation of information communicated between such equipment, thereby facilitating the application and use of digital control technology in buildings.

BACnet models each building automation and control device 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.

BACnet also defines a web services based secure service interface for integrating data from disparate, protocol independent, sources.

BACnet provides a comprehensive set of messages for conveying information between devices including, but not limited to:

- device discovery
- reading and writing individual and multiple properties and objects
- creating and deleting objects
- change of value services
- alarms and events
- trend, event and audit logging
- file transfer
- time synchronization
- device backup and restore

Answer

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

<u>ASHRAE Standard 135-2016</u>- 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	<u>TC 1.4</u>	
2	<u>SSPC 135</u>	
3		
4		
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