

Overview



BACnet is a communication protocol for Building Automation and Control (BAC) networks that leverage the ASHRAE, ANSI, and ISO 16484-5 standard protocol.

BACnet was designed to allow communication of building automation and control systems for applications such as heating, ventilating, and air-conditioning control (HVAC), lighting control, access control, and fire detection systems and their associated equipment. The BACnet protocol provides mechanisms for computerized building automation devices to exchange information, regardless of the particular building service they perform.

EasyEdge BACnet/IP Engine allows connectivity with BACnet protocol over Ethernet. With Automatic Device Discovery and Automatic Tag Generation, EasyEdge BACnet/IP Engine allows integrators to read and write data in real-time, from a Building Management System, an Energy Management System, or other in a few minutes.

Features

- Automatic Device Discovery feature;
- Automatic Objects and Properties tree generation based on Device Discovery;
- Supports Write priority request;
- Supports BACnet Broadcast Management Devices (BBMD);
- Supports Application Protocol Data Unit (APDU);
- Support for Read, Write and Subscription service (confirmed and unconfirmed);
- Supports the following Standard Objects, including most of the required properties:
 - Accumulator;
 - Analog Input;
 - Analog Output;
 - Analog Value;
 - Averaging;
 - Binary Input;
 - Binary Output;
 - Binary Value;
 - Command;
 - Device;
 - Event Enrollment;
 - Life Safety Point;
 - Life Safety Zone;
 - Multi-State Input;
 - Multi-State Output;
 - Multi-State Value;
 - Notification Class;
 - Program;
 - Trend Log;
- Supports Confirmed and Unconfirmed Event notifications for intrinsic and algorithmic for several Event States, including Change of Value, Change of State, Out of Range, Unsigned Range, and Command Failure;
- Adjustable polling time;
- Support for subscribe renovation/recovery;
- Adjustable subscribe renovation timeout;
- Support for objects with Read-only, Write-only or Subscribe-only service;
- Support for objects with Read and Subscribe service on simultaneously;
- Supported data types:
 - Null;
 - Boolean;
 - Unsigned INT;
 - Signed INT;
 - Real;
 - Double;
 - Octet String;
 - Character String;
 - Bit String;
 - Enumerated;
 - Date;
 - Time;
 - Object ID;
- Support for multiple instances of BACnet servers;
- Auto reconnection if the communication is lost;
- Optimized object at once request to avoid message traffic.