BACnet Building Automation Connector

Device compatible with the BACNet protocol

- Name: **BACnet**
- Version 1.0.0.0
- Protocol: BACnet
- Interface: TCP/IP
- Runtime: .NET 2.0 (Multiplatform)
- Configuration:
    - Devices / Protocols

Channels Configuration
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Module Configuration

This document has only information about the device connection settings and its address syntax.

For further Information, see:

- Devices Module
- Devices Module Reference

Channels Configuration

Protocol Options

Write Priority: From FrameworX 10.1.6a. The BACnet priority, from 1 to 16, of the Present Value writes this channel sends to commandable objects. The default, 0, sends writes without a priority, and the device applies priority 16. Writing the text NULL to Present Value, from a Text tag with no scaling, relinquishes the command at the configured priority. BACnet reserves priority 6 for minimum on and off time.



Linux Deployment

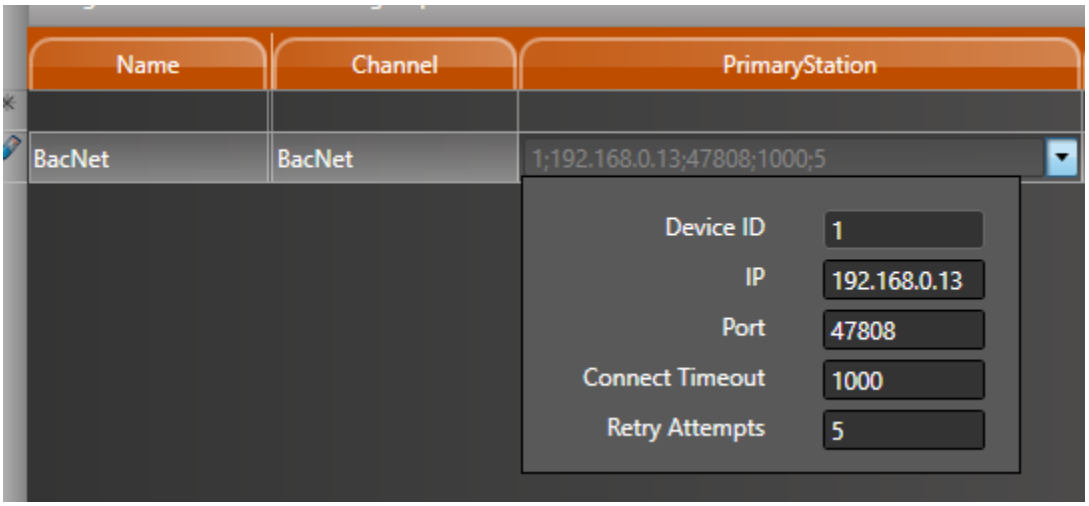
The BACnet driver assembly was renamed in **10.1.5** to satisfy the case-sensitive Linux filesystem. The canonical filename is `T.ProtocolDriver.BACnet.dll` (mixed-case *BACnet*, not *BACNet*). Linux runtimes resolve the assembly only at this exact case; older Windows-only deployments that shipped a lower- or upper-cased variant must be updated to the new filename before being copied to a Linux runtime host.

Nodes Configuration

Station Configuration

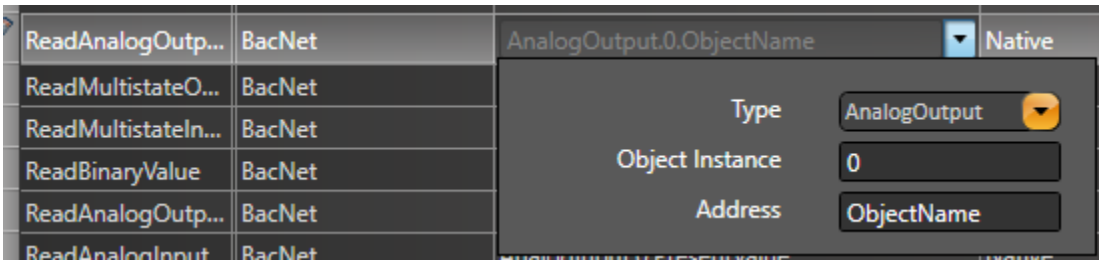
On the station configuration, there are the following parameters:

- **Device ID:** Each device on a BACnet inter-network is uniquely identified by its network number and device object instance.
- **IP:** Specifies the local BACnet/IP network number on which the driver is located.
- **Port:** Specifies the local UDP port.
- **Connect Timeout:** The connection timeout setting is the amount of time that the driver will wait for response
- **Retry Attempts:** The valid range is **1** to **10**. The default setting is **3** retries.



Points Configuration

The syntax for the BACNet communication point is as follows:



- **Type:**

  DataType indicator, following the list below:
  - AnalogOutput
  - AnalogInput
  - AnalogValue
  - BinaryOutput
  - BinaryInput
  - BinaryValue
  - MultiStateInput
  - MultiStateOutput
  - MultiStateValue
  - Schedule
- **Object instance:** as the instance on the BACnet Device.
- **Address:** as the property that is going to be read/written.

BACNet/IP Objects

Accumulator

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No

EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of Timestamp	**String**	Read Only[3]	No
HighLimit	Unsigned Integer	**DWord**, Long	Read Only	No
LimitEnable[1] .HighLimitEnable .LowLimitEnable	BACnetLimitEnable	**Word**, Short Boolean Boolean	Read/Write	No
LimitMonitoringInterval	Unsigned Integer	**DWord**, Long	Read/Write	No
LowLimit	Unsigned Integer	**DWord**, Long	Read Only	No
MaxPresValue	Unsigned Integer	**DWord**, Long	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
Prescale[5]	BACnetPrescale	**String**	Read/Write	No
PresentValue	Unsigned Integer	**DWord**, Long	Read/Write	No
ProfileName	CharacterString	**String**	Read Only	No
PulseRate	Unsigned Integer	**DWord**, Long	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
Scale[6]	BACnetScale	**String**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	No
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
Units	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
ValueBeforeChange	Unsigned Integer	**DWord**, Long	Read Only	No
ValueChangeTime	BACnetDateTime	**String**	Read Only[3]	No
ValueSet	Unsigned Integer	**DWord**, Long	Read Only	No

Priority Array Elements

Priority Array elements may be "**NULL**" or the numerical command value currently in effect. The array element index may range from 1 to 16, inclusive.

Analog Input

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
COVIncrement	REAL	**Float**	Read/Write	No

Deadband	REAL	**Float**	Read/Write	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of Timestamp	**String**	Read Only[3]	No
HighLimit	REAL	**Float**	Read Only	No
LimitEnable[1] .HighLimitEnable .LowLimitEnable	BACnetLimitEnable	**Word**, Short Boolean Boolean	Read/Write	No
LowLimit	REAL	**Float**	Read Only	No
MaxPresValue	REAL	**Float**	Read Only	No
MinPresValue	REAL	**Float**	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	REAL	**Float**	Read/Write	Yes
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
Resolution	REAL	**Float**	Read Only	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
Units	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
UpdateInterval	Unsigned Integer	**DWord**, Long	Read/Write	No

Analog Output

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
COVIncrement	REAL	**Float**	Read/Write	No
Deadband	REAL	**Float**	Read/Write	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No

EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimestamps[3]	Array of Timestamp	**String**	Read Only[3]	No
HighLimit	REAL	**Float**	Read Only	No
LimitEnable[1] .HighLimitEnable .LowLimitEnable	BACnetLimitEnable	**Word**, Short Boolean Boolean	Read/Write	No
LowLimit	REAL	**Float**	Read Only	No
MaxPresValue	REAL	**Float**	Read Only	No
MinPresValue	REAL	**Float**	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	REAL	**Float**	Read/Write	Yes
PriorityArray[16]	Array of BACnetPriorityArray	**String**	Read Only[3]	No
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
RelinquishDefault	REAL	**Float**	Read/Write	No
Resolution	REAL	**Float**	Read Only	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
Units	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No

Analog Value

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
COVIncrement	REAL	**Float**	Read/Write	No
Deadband	REAL	**Float**	Read/Write	No
Description	CharacterString	**String**	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]	No

HighLimit	REAL	**Float**	Read Only	No
LimitEnable[1] .HighLimitEnable .LowLimitEnable	BACnetLimitEnable	**Word**, Short Boolean Boolean	Read/Write	No
LowLimit	REAL	**Float**	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	REAL	**Float**	Read/Write	Yes
PriorityArray[16]	Array of BACnetPriorityArray	**String**	Read Only[3]	No
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
RelinquishDefault	REAL	**Float**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
Units	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No

Averaging

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
AttemptedSamples	Unsigned Integer	**DWord**, Long	Read Only
AverageValue	REAL	**Float**	Read Only
Description	CharacterString	**String**	Read Only
MaximumValue	REAL	**Float**	Read Only
MaximumValueTimestamp	BACnetDateTime	**String**	Read Only[1]
MinimumValue	REAL	**Float**	Read Only
MinimumValueTimestamp	BACnetDateTime	**String**	Read Only[1]
ObjectIdentifier[2] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[1]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[1]
ProfileName	CharacterString	**String**	Read Only
ValidSamples	Unsigned Integer	**DWord**, Long	Read Only
VarianceValue	REAL	**Float**	Read Only
WindowInterval	Unsigned Integer	**DWord**, Long	Read/Write
WindowSamples	Unsigned Integer	**DWord**, Long	Read/Write

Binary Input

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV

AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
ActiveText	CharacterString	**String**	Read Only	No
AlarmValue	BACnetBinaryPV[2]	**Boolean**	Read/Write	No
ChangeOfStateCount	Unsigned Integer	**DWord**, Long	Read/Write	No
ChangeOfStateTime	BACnetDataTime	**String**	Read Only[3]	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No
ElapsedActiveTime	Unsigned Integer	**DWord**, Long	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]	No
InactiveText	CharacterString	**String**	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
Polarity	BACnetPolarity[2]	**Boolean**	Read/Write	No
PresentValue	BACnetBinaryPV[2]	**Boolean**	Read/Write	Yes
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
TimeOfActiveTimeReset	BACnetDateTime	**String**	Read Only[3]	No
TimeOfStateCountReset	BACnetDateTime	**String**	Read Only[3]	No

Binary Output

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
ActiveText	CharacterString	**String**	Read Only	No
ChangeOfStateCount	Unsigned Integer	**DWord**, Long	Read/Write	No
ChangeOfStateTime	BACnetDateTime	**String**	Read Only[2]	No
Description	CharacterString	**String**	Read Only	No

DeviceType	CharacterString	**String**	Read Only	No
ElapsedActiveTime	Unsigned Integer	**DWord**, Long	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[3]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[2]	No
FeedbackValue	BACnetBinaryPV[3]	**Boolean**	Read/Write	No
InactiveText	CharacterString	**String**	Read Only	No
MinimumOffTime	Unsigned Integer	**DWord**, Long	Read Only	No
MinimumOnTime	Unsigned Integer	**DWord**, Long	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[3]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[2]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
Polarity	BACnetPolarity[3]	**Boolean**	Read/Write	No
PresentValue	BACnetBinaryPV[3]	**Boolean**	Read/Write	Yes
PriorityArray[16]	Array of BACnetPriorityArray	**String**	Read Only[2]	No
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[3]	**DWord**, Long	Read Only	No
RelinquishDefault	BACnetBinaryPV[3]	**Boolean**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
TimeOfActiveTimeReset	BACnetDateTime	**String**	Read Only[2]	No
TimeOfStateCountReset	BACnetDateTime	**String**	Read Only[2]	No

Binary Value

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
ActiveText	CharacterString	**String**	Read Only	No
AlarmValue	BACnetBinaryPV[2]	**Boolean**	Read/Write	No
ChangeOfStateCount	Unsigned Integer	**DWord**, Long	Read/Write	No
ChangeOfStateTime	BACnetDateTime	**String**	Read Only[3]	No
Description	CharacterString	**String**	Read Only	No
ElapsedActiveTime	Unsigned Integer	**DWord**, Long	Read Only	No

EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]	No
InactiveText	CharacterString	**String**	Read Only	No
MinimumOffTime	Unsigned Integer	**DWord**, Long	Read Only	No
MinimumOnTime	Unsigned Integer	**DWord**, Long	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	BACnetBinaryPV[2]	**Boolean**	Read/Write	Yes
PriorityArray[16]	Array of BACnetPriorityArray	**String**	Read Only[3]	No
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
RelinquishDefault	BACnetBinaryPV[2]	**Boolean**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
TimeOfActiveTimeReset	BACnetDateTime	**String**	Read Only[3]	No
TimeOfStateCountReset	BACnetDateTime	**String**	Read Only[3]	No

Calendar

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
DateList[N]	CalendarEntry	**String**	Read Only[1]
DateList[2]	List of CalendarEntry	**String**	Read/Write
Description	CharacterString	**String**	Read Only
ObjectIdentifier[3] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[1]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[4]	**DWord**, Long	Read Only[1]
PresentValue	Boolean	**Boolean**	Read/Write
ProfileName	CharacterString	**String**	Read Only

Command

Property Mnemonic	BACnet Data Type	OPC Data Type	Access

ActionText[N]	Array of CharacterString	**String**	Read/Write
AllWritesSuccessful	Boolean	**Boolean**	Read Only
Description	CharacterString	**String**	Read Only
InProcess	Boolean	**Boolean**	Read Only
ObjectIdentifier[1] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[2]
PresentValue	Unsigned Integer	**DWord**, Long	Read/Write
ProfileName	CharacterString	**String**	Read Only

Device

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
APDUSegmentTimeout	Unsigned Integer	**DWord**, Long	Read/Write
APDUTimeout	Unsigned Integer	**DWord**, Long	Read/Write
ApplicationSoftwareVersion	CharacterString	**String**	Read Only
BackupFailureTimeout	Unsigned Integer	**Word**, Short	Read Only
ConfigurationFiles[N]	Array of ObjectIdentifier	**DWord**, Long	Read Only
DatabaseRevision	Unsigned Integer	**DWord**, Long	Read Only
DaylightSavingsStatus	Boolean	**Boolean**	Read Only
Description	CharacterString	**String**	Read Only
FirmwareRevision	CharacterString	**String**	Read Only
LastRestoreTime	BACnetDateTime	**String**	Read Only[1]
LocalDate	Date	**String**	Read Only[1]
LocalTime	Time	**String**	Read Only[1]
Location	CharacterString	**String**	Read Only
MaxAPDULengthAccepted	Unsigned Integer	**DWord**, Long	Read/Write
MaxInfoFrames	Unsigned Integer	**DWord**, Long	Read Only
MaxMaster	Unsigned Integer	**DWord**, Long	Read Only
MaxSegmentsAccepted	Unsigned Integer	**DWord**, Long	Read Only
ModelName	CharacterString	**String**	Read Only
NumberOfAPDURetries	Unsigned Integer	**DWord**, Long	Read/Write
ObjectIdentifier[2] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[1]
ObjectList[N]	Array of ObjectIdentifier	**DWord**, Long	Read Only[1]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[1]
ProfileName	CharacterString	**String**	Read Only
ProtocolRevision	Unsigned Integer	**DWord**, Long	Read Only
ProtocolVersion	Unsigned Integer	**DWord**, Long	Read Only
SegmentationSupported	BACnetSegmentation[3]	**DWord**, Long	Read Only
SystemStatus	BACnetDeviceStatus[3]	**DWord**, Long	Read/Write
UTCOffset	INTEGER	**Long**, Word	Read Only

VendorIdentifier	Unsigned Integer	**Word**, Short	Read Only
VendorName	CharacterString	**String**	Read Only

Event Enrollment

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only
Description	CharacterString	**String**	Read Only
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write
EventState	BACnetEventState[2]	**DWord**, Long	Read Only
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]
EventType	BACnetEventType[2]	**DWord**, Long	Read Only
IssueConfirmedNotifications	Boolean	**Boolean**	Read/Write
NotificationClass	Unsigned Integer	**Word**, Short	Read Only
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]
Priority	Unsigned Integer	**DWord**, Long	Read Only
ProcessIdentifier	Unsigned Integer	**DWord**, Long	Read/Write
ProfileName	CharacterString	**String**	Read Only

File

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
Archive	Boolean	**Boolean**	Read Only
Description	CharacterString	**String**	Read Only
FileAccessMethod	BACnetFileAccessMethod[1]	**DWord**, Long	Read Only
FileSize	Unsigned Integer	**DWord**, Long	Read Only
FileType	CharacterString	**String**	Read Only
ModificationDate	BACnetDateTime	**String**	Read Only[2]
ObjectIdentifier[3] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[1]	**DWord**, Long	Read Only[2]
ProfileName	CharacterString	**String**	Read Only
ReadOnly	Boolean	**Boolean**	Read Only
RecordCount	Unsigned Integer	**DWord**, Long	Read/Write

Group

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
Description	CharacterString	**String**	Read Only
ObjectIdentifier[1] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[2]
ProfileName	CharacterString	**String**	Read Only

Life Safety Point

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AcceptedModes	List of BACnetLifeSafetyMode	**DWord**, Long	Read Only[1]	No
AckedTransitions[2] .ToFault .ToNormal .ToOffNormal	BACnetEventTansitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
AlarmValues	List of BACnetLifeSafetyState	**DWord**, Long	Read Only[1]	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No
DirectReading	REAL	**Float**	Read Only	No
EventEnable[2] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[3]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[1]	No
FaultValues	List of BACnetLifeSafetyState	**DWord**, Long	Read Only[1]	No
LifeSafetyAlarmValues	List of BACnetLifeSafetyState	**DWord**, Long	Read Only[1]	No
MaintenanceRequired	BACnetMaintenance[3]	**DWord**, Long	Read/Write	No
Mode	BACnetLifeSafetyMode[3]	**DWord**, Long	Read/Write	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[3]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[1]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[1]	No
OperationExpected	BACnetLifeSafetyOperation[3]	**DWord**, Long	Read Only	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	BACnetLifeSafetyState[3]	**DWord**, Long	Read/Write	Yes
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[3]	**DWord**, Long	Read Only	No
Setting	Unsigned Integer	**Byte**, Char	Read/Write	No
Silenced	BACnetSilencedState[3]	**DWord**, Long	Read Only	No

StatusFlags[2] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
TrackingValue	BACnetLifeSafetyState[3]	**DWord**, Long	Read Only	No
Units	BACnetEngineeringUnits[3]	**DWord**, Long	Read Only	No

Life Safety Zone

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AcceptedModes	List of BACnetLifeSafetyMode	**DWord**, Long	Read Only[1]	No
AckedTransitions[2] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
AlarmValues	List of BACnetLifeSafetyState	**DWord**, Long	Read Only[1]	No
Description	CharacterString	String	Read Only	No
DeviceType	CharacterString	String	Read Only	No
EventEnable[2] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[3]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[1]	No
FaultValues	List of BACnetLifeSafetyState	**DWord**, Long	Read Only[1]	No
LifeSafetyAlarmValues	List of BACnetLifeSafetyState	**DWord**, Long	Read Only[1]	No
MaintenanceRequired	Boolean	Boolean	Read/Write	No
Mode	BACnetLifeSafetyMode[3]	**DWord**, Long	Read/Write	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[3]	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[1]	No
ObjectName	CharacterString	String	Read Only	No
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[1]	No
OperationExpected	BACnetLifeSafetyOperation[3]	**DWord**, Long	Read Only	No
OutOfService	Boolean	Boolean	Read/Write	No
PresentValue	BACnetLifeSafetyState[3]	**DWord**, Long	Read/Write	Yes
ProfileName	CharacterString	String	Read Only	No
Reliability	BACnetReliability[3]	**DWord**, Long	Read Only	No
Silenced	BACnetSilencedState[3]	**DWord**, Long	Read Only	No
StatusFlags[2] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No

TrackingValue	BACnetLifeSafetyState[3]	**DWord**, Long	Read Only	No

Loop

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
Action	BACnetAction[2]	**DWord**, Long	Read Only	No
Bias	REAL	**Float**	Read/Write	No
ControlledVariableUnits	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
ControlledVariableValue	REAL	**Float**	Read Only	Yes
COVIncrement	REAL	**Float**	Read/Write	No
DerivativeConstant	REAL	**Float**	Read/Write	No
DerivativeConstantUnits	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
Description	CharacterString	**String**	Read Only	No
ErrorLimit	REAL	**Float**	Read/Write	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]	No
IntegralConstant	REAL	**Float**	Read/Write	No
IntegralConstantUnits	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
MaximumOutput	REAL	**Float**	Read Only	No
MinimumOutput	REAL	**Float**	Read Only	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
OutputUnits	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
PresentValue	REAL	**Float**	Read Only	Yes
PriorityForWriting	Unsigned Integer	**DWord**, Long	Read/Write	No
ProfileName	CharacterString	**String**	Read Only	No
ProportionalConstant	REAL	**Float**	Read/Write	No
ProportionalConstantUnits	BACnetEngineeringUnits[2]	**DWord**, Long	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
Setpoint	REAL	**Float**	Read/Write	Yes

StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No
UpdateInterval	Unsigned Integer	**DWord**, Long	Read/Write	No

Multi-State Input

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
AlarmValues	List of Unsigned Integers	**DWord**, Long	Read Only[2]	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[3]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[2]	No
FaultValues	List of Unsigned Integers	**DWord**, Long	Read Only[2]	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[3]	**DWord**, Long	Read Only	No
NumberOfStates	Unsigned Integer	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[2]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	Unsigned Integer	**DWord**, Long	Read/Write	Yes
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[3]	**DWord**, Long	Read Only	No
StateText[N]	Array of CharacterString	**String**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No

Multi-State Output

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV

AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
Description	CharacterString	**String**	Read Only	No
DeviceType	CharacterString	**String**	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[2]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]	No
FeedbackValue	Unsigned Integer	**DWord**, Long	Read/Write	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[2]	**DWord**, Long	Read Only	No
NumberOfStates	Unsigned Integer	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[2]	**DWord**, Long	Read Only[3]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	Unsigned Integer	**DWord**, Long	Read/Write	Yes
PriorityArray[16]	Array of BACnetPriorityArray	**String**	Read Only[3]	No
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[2]	**DWord**, Long	Read Only	No
RelinquishDefault	Unsigned Integer	**DWord**, Long	Read/Write	No
StateText[N]	Array of CharacterString	**String**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay	Unsigned Integer	**DWord**, Long	Read/Write	No

Multi-State Value

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only	No
AlarmValues	List of Unsigned Integers	**DWord**, Long	Read Only[2]	No
Description	CharacterString	**String**	Read Only	No
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTransitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write	No
EventState	BACnetEventState[3]	**DWord**, Long	Read Only	No
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[2]	No

FaultValues	List of Unsigned Integers	**DWord**, Long	Read Only[2]	No
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only	No
NotifyType	BACnetNotifyType[3]	**DWord**, Long	Read Only	No
NumberOfStates	Unsigned Integer	**DWord**, Long	Read Only	No
ObjectIdentifier[4] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[2]	No
OutOfService	Boolean	**Boolean**	Read/Write	No
PresentValue	Unsigned Integer	**DWord**, Long	Read/Write	Yes
PriorityArray[16]	Array of BACnetPriorityArray	**String**	Read Only[2]	No
ProfileName	CharacterString	**String**	Read Only	No
Reliability	BACnetReliability[3]	**DWord**, Long	Read Only	No
RelinquishDefault	Unsigned Integer	**DWord**, Long	Read/Write	No
StateText[N]	Array of CharacterString	**String**	Read/Write	No
StatusFlags[1] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only	Yes
TimeDelay				

Notification Class

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
AckRequired[1] .ToFault .ToNormal .ToOffNormal	BACnetEvnetTransitionBits	**Word**, Short Boolean Boolean Boolean	Read Only
Description	CharacterString	String	Read Only
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only
ObjectIdentifier[2] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]
ObjectName	CharacterString	String	Read Only
ObjectType	BACnetObjectType[4]	**DWord**, Long	Read Only[3]
Priority[3]	Array of Unsigned Integers	**DWord**, Long	Read Only[3]
ProfileName	CharacterString	String	Read Only

Program

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
Description	CharacterString	**String**	Read Only
DescriptionOfHalt	CharacterString	**String**	Read Only
InstanceOf	CharacterString	**String**	Read Only

ObjectIdentifier[1] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[2]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[3]	**DWord**, Long	Read Only[2]
OutOfService	Boolean	**Boolean**	Read/Write
ProfileName	CharacterString	**String**	Read Only
ProgramChange	BACnetProgramRequest[3]	**DWord**, Long	Read Only
ProgramLocation	CharacterString	**String**	Read Only
ProgramState	BACnetProgramState[3]	**DWord**, Long	Read Only
ReasonForHalt	BACnetProgramError[3]	**DWord**, Long	Read Only
Reliability	BACnetReliability[3]	**DWord**, Long	Read Only
StatusFlags[4] .Fault .InAlarm .OutOfService .Overridden	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only

Schedule

Property Mnemonic	BACnet Data Type	OPC Data Type	Access	COV
Description	CharacterString	**String**	Read Only	No
EffectivePeriod	BACnetDateRange	**String**	Read Only[1]	No
ExceptionSchedule[2]	BACnetARRAY[N] of BACnetSpecialEvent	**String**	Read/Write	No
ObjectIdentifier[3] .ObjectInstance .ObjectType	BACnetObjectIdentier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[1]	No
ObjectName	CharacterString	**String**	Read Only	No
ObjectType	BACnetObjectType[4]	**DWord**, Long	Read Only[1]	No
PresentValue	Any	**Float**	Read/Write	No
PriorityForWriting	Unsigned Integer	**DWord**, Long	Read/Write	No
ProfileName	CharacterString	**String**	Read Only	No
ScheduleDefault	Real	Float	Read Only	No
StatusFlags[5] .InAlarm .Fault .Overridden .OutofService	BACnetStatusFlags	**Word**, Short Boolean Boolean Boolean Boolean	Read Only[1]	Yes
Reliability	BACnetReliability	**DWord**, Long	Read Only[1]	No
OutofService WeeklySchedule[6]	Boolean BACnetARRAY[7] of BACnetDailySchedule	**Boolean** **String**	Read/Write Read/Write	No No

Trend Log

Property Mnemonic	BACnet Data Type	OPC Data Type	Access
AckedTransitions[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTansitionBits	**Word**, Short Boolean Boolean Boolean	Read Only

BufferSize	Unsigned Integer	**DWord**, Long	Read Only
COVResubscriptionInterval	Unsigned Integer	**DWord**, Long	Read/Write
CurrentNotifyTime[2]	BACnetDateTime	**String**	Read Only[3]
Description	CharacterString	**String**	Read Only
EventEnable[1] .ToFault .ToNormal .ToOffNormal	BACnetEventTansitionBits	**Word**, Short Boolean Boolean Boolean	Read/Write
EventState	BACnetEventState[4]	**DWord**, Long	Read Only
EventTimeStamps[3]	Array of TimeStamp	**String**	Read Only[3]
LastNotifyRecord[5]	Unsigned Integer	**DWord**, Long	Read Only
LogEnable	Boolean	**Boolean**	Read/Write
LogInterval	Unsigned Integer	**DWord**, Long	Read/Write
NotificationClass	Unsigned Integer	**DWord**, Long	Read Only
NotificationThreshold	Unsigned Integer	**DWord**, Long	Read Only
NotifyType	BACnetNotifyType[4]	**DWord**, Long	Read Only
ObjectIdentifier[6] .ObjectInstance .ObjectType	BACnetObjectIdentifier	**DWord**, Long **DWord**, Long **DWord**, Long	Read Only[3]
ObjectName	CharacterString	**String**	Read Only
ObjectType	BACnetObjectType[4]	**DWord**, Long	Read Only[3]
PreviousNotifyTime[2]	BACnetDateTime	**String**	Read Only[3]
ProfileName	CharacterString	**String**	Read Only
RecordCount	Unsigned Integer	**DWord**, Long	Read/Write
RecordsSinceNotification	Unsigned Integer	**DWord**, Long	Read Only
StartTime	BACnetDateTime	**String**	Read Only[3]
StopTime	BACnetDateTime	**String**	Read Only[3]
StopWhenFull	Boolean	**Boolean**	Read/Write
TotalRecordCount	Unsigned Integer	**DWord**, Long	Read Only

Enumerators

BACnetAction

Value	Action
0	Direct
1	Reverse

BACnetBackupState

Value	Event Type
0	Idle
1	Preparing for backup
2	Preparing for restore
3	Performing a backup

4	Performing a restore
5	Backup failure
6	Restore failure

BACnetBinaryPV

Value	Binary Present Value
0	Inactive
1	Active

BACnetDeviceStatus

Value	Device Status
0	Operational
1	Operational-Read Only
2	Download-required
3	Download-in-progress
4	Non-operational
5	Backup-in-progress

BACnetEngineeringUnits

Acceleration

Value	Unit
166	Meters-per-second-per-second

Area

Value	Unit
0	Square-meters
1	Square-feet
115	Square-inches
116	Square-centimeters

Currency

Value	Unit
105	Currency1
106	Currency2
107	Currency3

108	Currency4
109	Currency5
110	Currency6
111	Currency7
112	Currency8
113	Currency9
114	Currency10

Electrical

Value	Unit
2	Milliamperes
3	Amperes
4	Ohms
5	Volts
6	Kilo-volts
7	Mega-volts
8	Volt-amperes
9	Kilo-volt-amperes
10	Mega-volt-amperes
11	Volt-amperes-reactive
12	Kilo-volt-amperes-reactive
13	Mega-volt-amperes-reactive
14	Degrees-phase
15	Power-factor
122	Kilohms
123	Megohms
124	Millivolts
145	Milliohms
167	Amperes-per-meter
168	Amperes-per-square-meter
169	Ampere-square-meters
170	Farads
171	Henrys
172	Ohm-meters
173	Siemens
174	Siemens-per-meter
175	Teslas
176	Volts-per-degree-Kelvin
177	Volts-per-meter
178	Webers

Energy

Value	Unit
16	Joules
17	Kilojoules
18	Watt-hours
19	Kilowatt-hours
20	BTUs
21	Therms
22	Ton-hours
125	Kilojoules-per-kilogram
126	Megajoules
146	Megawatt-hours
147	Kilo-BTUs
148	Mega-BTUs

Enthalpy

Value	Unit
23	Joules-per-kilogram-dry-air
24	BTUs-per-pound-dry-air
117	BTUs-per-pound
149	Kilojoules-per-kilogram-dry-air
150	Megajoules-per-kilogram-dry-air

Entrophy

Value	Unit
127	Joules-per-degree-Kelvin
128	Joules-per-kilogram-degree-Kelvin
151	Kilojoules-per-degree-Kelvin
152	Megajoules-per-degree-Kelvin

Force

Value	Unit
153	Newton

Frequency

Value	Unit
25	Cycles-per-hour
26	Cycles-per-minute
27	Hertz
129	Kilohertz
130	Megahertz
131	Per-hour

Humidity

Value	Unit
28	Grams-of-water-per-kilogram-dry-air
29	Percent-relative-humidity

Length

Value	Unit
30	Millimeters
31	Meters
32	Inches
33	Feet
118	Centimeters

Light

Value	Unit
34	Watts-per-square-foot
35	Watts-per-square-meter
36	Lumens
37	Luxes
38	Foot-candles
179	Candelas
180	Candelas-per-square-meter

Mass

Value	Unit
39	Kilograms
40	Pounds-mass
41	Tons

Mass Flow

Value	Unit
42	Kilograms-per-second
43	Kilograms-per-minute
44	Kilograms-per-hour
45	Pounds-mass-per-minute
46	Pounds-mass-per-hour
119	Pounds-mass-per-second
154	Grams-per-second
155	Grams-per-minute
156	Tons-per-hour

Power

Value	Unit
47	Watts
48	Kilowatts
49	Megawatts
50	BTUs-per-hour
51	Horsepower
52	Tons-refrigeration
132	Milliwatts
157	Kilo-BTUs-per-hour

Pressure

Value	Unit
53	Pascals
54	Kilopascals
55	Bars
56	Pounds-force-per-square-inch
57	Centimeters-of-water
58	Inches-of-water
59	Millimeters-of-mercury
60	Centimeters-of-mercury
61	Inches-of-mercury
133	Hectopascals
134	Millibars

Temperature

Value	Unit
62	Degrees-Celsius
63	Degrees-Kelvin
64	Degrees-Fahrenheit
65	Degree-days-Celsius
66	Degree-days-Fahrenheit
120	Delta-Degrees-Fahrenheit
121	Delta-Degrees-Kelvin
181	Kelvins-per-hour
182	Kelvins-per-minute

Time

Value	Unit
67	Years
68	Months
69	Weeks
70	Days
71	Hours
72	Minutes
73	Seconds
158	Hundredths-seconds
159	Milliseconds

Torque

Value	Unit
160	Newton-meters

Velocity

Value	Unit
74	Meters-per-second
75	Kilometers-per-hour
76	Feet-per-second
77	Feet-per-minute
78	Miles-per-hour
161	Millimeters-per-second
162	Millimeters-per-minute
163	Meters-per-minute
164	Meters-per-hour

Volume

Value	Unit
79	Cubic-feet
80	Cubic-meters
81	Imperial-gallons
82	Liters
83	Us-gallons

Volumetric Flow

Value	Unit
84	Cubic-feet-per-minute
85	Cubic-meters-per-second
86	Imperial-gallons-per-minute
87	Liters-per-second
88	Liters-per-minute
89	Us-gallons-per-minute
135	Cubic-meters-per-hour
136	Liters-per-hour
142	Cubic-feet-per-second
165	Cubic-meters-per-minute

Other

Value	Unit
90	Degrees-angular
91	Degrees-Celsius-per-hour
92	Degrees-Celsius-per-minute
93	Degrees-Fahrenheit-per-hour
94	Degrees-Fahrenheit-per-minute
95	No-units
96	Parts-per-million
97	Parts-per-billion
98	Percent
99	Percent-per-second
100	Per-minute
101	Per-second
102	Psi-per-Degree-Fahrenheit
103	Radians

104	Revolutions-per-minute
137	Kilowatt-hours-per-square-meter
138	Kilowatt-hours-per-square-foot
139	Megajoules-per-square-meter
140	Megajoules-per-square-foot
141	Watts-per-square-meter-Degree-Kelvin
143	Percent-obscuration-per-foot
144	Percent-obscuration-per-meter
183	Joule-seconds
185	Square-meters-per-Newton
186	Kilogram-per-cubic-meter
187	Newton-seconds
188	Newtons-per-meter
189	Watts-per-meter-per-degree-Kelvin

BACnetEventState

Value	Event State
0	Normal
1	Fault
2	Off-normal
3	High-limit
4	Low-limit
5	Life-safety-alarm

BACnetEventType

Value	Event Type
0	Change-of-bitstring
1	Change-of-state
2	Change-of-value
3	Command-failure
4	Floating-limit
5	Out-of-range
6	Complex-event-type
7	Deprecated
8	Change-of-life-safety
9	Extended
10	Buffer-ready
11	Unsigned-range
12	Reserved for future addenda

13	Access-event
14	Double-out-of-range
15	Signed-out-of-range
16	Unsigned-out-of-range
17	Change-of-characterstring
18	Change-of-status-flags
19	Change-of-reliability
20	None

BACnetFileAccessMethod

Value	Access Method
0	Record-access
1	Stream-access

BACnetLifeSafetyMode

Value	Life Safety Mode
0	Off
1	On
2	Test
3	Manned
4	Unmanned
5	Armed
6	Disarmed
7	Pre-armed
8	Slow
9	Fast
10	Disconnected
11	Enabled
12	Disabled
13	Automatic-release-disabled
14	Default

BACnetLifeSafetyOperation

Value	Life Safety Operation
0	None
1	Silence
2	Silence-audible
3	Silence-visible

4	Reset
5	Reset-alarm
6	Reset-fault
7	Unsilence
8	Unsilence-audible
9	Unsilence-visual

BACnetLifeSafetyState

Value	Life Safety State
0	Quiet
1	Pre-alarm
2	Alarm
3	Fault
4	Fault-pre-alarm
5	Fault-alarm
6	Not-ready
7	Active
8	Tamper
9	Test-alarm
10	Test-active
11	Test-fault
12	Test-fault-alarm
13	Holdup
14	Duress
15	Tamper-alarm
16	Abnormal
17	Emergency-power
18	Delayed
19	Blocked
20	Local-alarm
21	General-alarm
22	Supervisory
23	Test-supervisory

BACnetMaintenance

Value	Maintenance
0	None
1	Periodic-test
2	Need-service-operational

3	Need-service-inoperative

BACnetNotifyType

Value	Notify Type
0	Alarm
1	Event
2	Ack-notification

BACnetObjectType

Value	Object Type
0	Analog-input
1	Analog-output
2	Analog-value
3	Binary-input
4	Binary-output
5	Binary-value
6	Calendar
7	Command
8	Device
9	Event-enrollment
10	File
11	Group
12	Loop
13	Multi-state-input
14	Multi-state-output
15	Notification-class
16	Program
17	Schedule
18	Averaging
19	Multi-state-value
20	Trend-log
21	Life-safety-point
22	Life-safety-zone
23	Accumulator

BACnetPolarity

Value	Polarity
0	Normal

1	Reverse

BACnetProgramError

Value	Program Error
0	Normal
1	Load-failed
2	Internal
3	Program
4	Other

BACnetProgramRequest

Value	Program Request
0	Ready
1	Load
2	Run
3	Halt
4	Restart
5	Unload

BACnetProgramState

Value	Program State
0	Idle
1	Loading
2	Running
3	Waiting
4	Halted
5	Unloading

BACnetReliability

Value	Reliability
0	No-fault-detected
1	No-sensor
2	Over-range
3	Under-range
4	Open-loop
5	Shorted-loop
6	No-output

7	Unreliable-other
8	Process-error
9	Multi-state-fault
10	Configuration-error
12	Communication-failure
13	Member-fault
14	Monitored-object-fault
15	Tripped

BACnetSegmentation

Value	Segmentation
0	Segmented-both
1	Segmented-transmit
2	Segmented-receive
3	No-segmentation

BACnetSilencedState

Value	Silenced State
0	Unsilenced
1	Audible-silenced
2	Visible-silenced
3	All-silenced

BACnetVTClass

Value	VT Class
0	Default-terminal
1	ANSI-x3-64
2	Dec-vt52
3	Dec-vt100
4	Dec-vt220
5	Hp-700-94
6	IBM-3130

Driver Revision History

BACNet Revision History	
Version	**Notes**
1.0.0.0	Initial release on new documentation standards

1.0.0.1	MultiStateValue type added and device id corrections
1.0.0.2	Renamed driver assembly to `T.ProtocolDriver.BACnet.dll` (mixed-case) so it resolves on the case-sensitive Linux filesystem; enables Linux runtime deployment.

In this section...