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# Edgelink Configuration

## 1. Add Device

☒ Enable

Name:

NewDevice

Device Type:

BACnet IP

☐ Device Model

Double Click to Select Device Template ...

Unit Number:


1


Tag Write Type:

Single Write

Description:

☒ Add device name as prefix to IO tags

 Bulk Copy

 TCP/IP

IP/Domain:

192.168.172.226

Port Number:

47808

Extention Properties

☐ Device Address (if other than Unit Number):

Device Broadcast [I AM] Time (second):

0

Polling Cycle:

1

Device Instance #:

0

Max Property/ Request:

0

Synchronize Time at(Ex. 23:50:00):

01:00:00

**Device Type:** BACnet IP

**Unit Number:** No meaning.

**IP and Port:** The IP and the port of BACnet server.

**Device Broadcast [I AM] Time (second):** If COV (Change of Value) reporting is enabled in the server, configure the Device broadcast I AM to the frequency the device transmits it's I AM. COV means the device responds only when there is a change of value and the I AM is used to mark the device as good. If use I AM broadcast, and the I AM message is not received within the period, the device will be marked as failed.

**Polling Cycle:** It is the Multiple of TCP port scan time. For example, Polling Cycle = 1 means

the device is polled at the TCP port scan time. Polling Cycle =2 means the device is polled at 2\*scan time.

**Device Instance #:** Device instance number of the BACNet server.

**Max Property/Request:** 0=Read 70 tags each poll, 1=Read 1 tag per poll, 2=Read 2 tags each poll, etc. Edgeline uses a deterministic request size based generated at download. So, you will probably have to experiment with your devices to determine the Max Read Property size.

**Synchronize Time at (Ex. 23:50:00) :** Configure the Synchronize Time to some other time of Day.

## 2. Add Tags

The address format is: TypeNo.InstanceNo.PropertyId.

**TypeNo. :** Our driver support Analog Input, Analog Output, Analog Value, Binary Input, Binary Output and Binary Value.

Type	TypeNo.
Analog Input	0
Analog Output	1
Analog Value	2
Binary Input	3
Binary Output	4
Binary Value	5

**InstanceNo.:** The Index of the tag.

**PropertyId:** You can find it in BACNet protocol. For example, present value is 85.

**Priority:** TypeNo.InstanceNo.PropertyId/**P=N** (N is the priority level: 1~16, the lower value, the higher priority.)

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## Address Example:

To read the **Present Value** of Tags, some examples of Addresses are:

Type and index	Address
AI_2	0.2.85
AO_2	1.2.85
AV_2	2.2.85
BI_2	3.2.85
BO_2	4.2.85
BV_2	5.2.85

## 3. Error Code

Tag	Value	Quality	Timestamp
NewDevice:right	31255.20	Good	2020-11-04T01:15:17(+08:00)
NewDevice:wrong_instanceNo	0.00	b01fH	1970-01-01T08:00:00(+08:00)
NewDevice:wrong_propertyID	0.00	b020H	1970-01-01T08:00:00(+08:00)

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Error code	Meaning
GOOD	No error
C010	Device Idle, I-AM timeout
C002	Data type mismatch
A00X	Discrete value over max state
QCode bit coded	0001 in alarm, 0002 Fault, 0004 Overridden, 0008 Out of service
b014	No space to write property
b01b	Read access denied
b01f	Unknown object
b020	Unknown property
b025	Value out of range
b028	Write access denied
b02a	Invalid array index
b02f	Datatype not supported
b030	Duplicate name
b031	Duplicate object id
b032	Property is not an array
b033	Abort buffer overflow
b034	Abort invalid apdu in this state
b035	Abort preempted by higher priority task
b036	Abort segmentation not supported
b037	Abort proprietary
b038	Abort other
b03b	Reject buffer overflow
b03c	Reject inconsistent parameters
b03d	Reject invalid parameter data type
b03e	Reject invalid tag
b03f	Reject missing required parameter
b040	Reject parameter out of range
b041	Reject too many arguments
b042	Reject undefined enumeration
b043	Reject unrecognized service
b044	Reject proprietary

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<b>b045</b>	<b>Reject other</b>
<b>b050</b>	<b>Parameter out of range</b>
<b>b07b</b>	<b>Abort apdu too long</b>
<b>b07c</b>	<b>Abort application exceeded reply time</b>
<b>b07d</b>	<b>Abort out of resources</b>
<b>b07e</b>	<b>Abort tsm timeout</b>
<b>b07f</b>	<b>Abort window size out of range</b>
<b>b0100</b>	<b>Loss of port connection</b>
<b>b0101</b>	<b>Header timeout error</b>
<b>b0102</b>	<b>Data timeout error</b>
<b>b0103</b>	<b>NPDU Timeout error</b>
<b>b0104</b>	<b>Header CRC error</b>
<b>b0105</b>	<b>Data CRC error</b>
<b>b0106</b>	<b>Non-NPDU message error</b>
<b>b0107</b>	<b>Timeout error</b>
<b>b0108</b>	<b>Serial port error</b>
<b>b0109</b>	<b>Invalid Write Property Error</b>
<b>b010a</b>	<b>Invalid Read Property Error</b>
<b>b010b</b>	<b>No valid read data</b>
<b>b010c</b>	<b>Unsupported Frame Type</b>
<b>b010d</b>	<b>Error in the MS/TP Network</b>
<b>b010e</b>	<b>Unknown Data Type to write</b>
<b>b010f</b>	<b>Invalid Destination MAC Address</b>
<b>b0110</b>	<b>Invalid Source MAC Address</b>
<b>b0111</b>	<b>Invalid Header Information</b>
<b>b0112</b>	<b>Unable to get a valid Invoke ID</b>