

Date: **10/05/2016**

Vendor Name: **OEMCtrl**

Product Name: **Protocol Converter**

Product Model Number: **XPC**

Applications Software Version: **<depends on application>** Firmware Revision: **6.00a**

BACnet Protocol Revision: **9**

Product Description:

The XPC (Unitary Protocol Converter) sets a new standard for multiple equipment protocol conversion. It can convert between two open protocols, or from a proprietary protocol to an open protocol, to integrate with virtually any Building Automation System. One of the unique things about the XPC is the ability to select the open protocol you want with the simple flip of a DIP switch. Choose from BACnet, Modbus, N2 Bus, or LonWorks. The XPC also offers the ability to plug in an optional backlit LCD display/keypad to allow you to view any of the points in your system. The XPC may be used on a BACnet MS/TP or ARCnet 156Kbps network.

BACnet Standardized Device Profile (Annex L):

- BACnet Operator Workstation (B-OWS)
- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Display (B-OD)
- BACnet Building Controller (B-BC)
- BACnet Advanced Application Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)

List all BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-A	AE-N-I-B	SCHED-I-B	T-VMT-I-B	DM-DDB-A
DS-RP-B	AE-ACK-B	SCHED-E-B	T-ATR-B	DM-DDB-B
DS-RPM-A	AE-ASUM-B			DM-DOB-A
DS-RPM-B	AE-ESUM-B			DM-DOB-B
DS-RR-B	AE-INFO-B			DM-DCC-B
DS-WP-A				DM-PT-A
DS-WP-B				DM-PT-B
DS-WPM-A				DM-TS-A
DS-WPM-B				DM-TS-B
DS-COV-A				DM-UTC-A
DS-COV-B				DM-UTC-B
DS-COVU-A				DM-RD-B
DS-COVU-B				DM-LM-B
				DM-R-B
				DM-ATS-A

Segmentation Capability:

- Able to transmit segmented messages
- Able to receive segmented messages

Window Size 1

Window Size 1

Standard Object Types Supported:

An object type is supported if it may be present in the device. For each standard Object Type supported provide the following data:

- 1) Whether objects of this type are dynamically creatable using the CreateObject service
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service
- 3) List of the optional properties supported
- 4) List of all properties that are writable where not otherwise required by this standard
- 5) List of all properties that are conditionally writable where not otherwise required by this standard.
- 6) List of proprietary properties and for each its property identifier, datatype, and meaning
- 7) List of any property range restrictions

(List of object types starts on page 4 ...)

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s): 156Kbps
- MS/TP master (Clause 9), baud rate(s): **9600, 19200, 38400, 76800**_
- MS/TP slave (Clause 9), baud rate(s): _____
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
- Point-To-Point, modem, (Clause 10), baud rate(s): _____
- LonTalk, (Clause 11), medium: _____
- BACnet/Zigbee (Annex O) _____
- Other: _____

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) Yes No

Networking Options:

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No
 - Does the BBMD support network address translation? Yes No

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- ANSI X3.4
- IBM™/Microsoft™ DBCS
- ISO 8859-1
- ISO 10646 (UCS-2)
- ISO 10646 (UCS-4)
- JIS C 6226

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports: None.

Network Security Options:

- Non-secure Device – is capable of operating without BACnet Network Security
- Secure Device – is capable of using BACnet Network Security (NS-SD BIBB)
 - Multiple Application-Specific Keys
 - Supports encryption (NS-ED BIBB)
 - Key Server (NS-KS BIBB)

Analog Input (ASVI_CS):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - cov-increment
 - deadband
 - description
 - device-type
 - event-enable
 - event-time-stamps
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - reliability
 - resolution
 - time-delay
4. Writeable properties:
 - cov-increment
 - deadband
 - description
 - device-type
 - event-enable
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - out-of-service
 - time-delay
 - units
5. Proprietary properties:

4168	cs-comb-algorithm	optional/writable
4169	cs-disp-source	optional/writable
4170	cs-sens-enable-arr	optional/writable
4173	cs-corrected-value-arr	optional/
4171	cs-sens-status-arr	optional
4172	cs-sens-calib-arr	optional/writable
6. Range restrictions:

description	limited to 50 octets in length
device-type	limited to 50 octets in length
notification-class	must be valid notification-class
time-delay	0 to 4294967295

Analog Value (AVP_CS):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - cov-increment
 - deadband
 - description
 - event-enable
 - event-time-stamps
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - priority-array
 - reliability
 - relinquish-default
 - time-delay
4. Writeable properties:
 - cov-increment
 - deadband
 - description
 - event-enable
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay
 - units
5. Proprietary properties: None
6. Range restrictions:

description	limited to 50 octets in length
present-value	limited by min and max set via the microblock
relinquish-default	limited by min and max set via the microblock
notification-class	must be valid notification-class
time-delay	0 to 4294967295

Analog Value (AVP_CS_Setpoint):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - cov-increment
 - description
 - reliability
4. Writeable properties:
 - cov-increment
 - description
 - out-of-service
 - present-value
 - units
5. Proprietary properties:

4174	Private-edit-range-min	optional
4175	Private-edit-range-max	optional
6. Range restrictions:

description	limited to 50 octets in length
present-value	limited by min and max set via the microblock

Analog Value (AVS_CS_Setpoint):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - cov-increment
 - description
 - reliability
4. Writeable properties:
 - cov-increment
 - description
 - out-of-service
 - units
5. Proprietary properties: None
6. Range restrictions:

description	limited to 50 octets in length
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Analog Value (PAR):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:

- acked-transitions
- cov-increment
- deadband
- description
- event-enable
- event-time-stamps
- high-limit
- limit-enable
- low-limit
- notification-class
- notify-type
- priority-array
- reliability
- relinquish-default
- time-delay
- 4. Writeable properties:
 - cov-increment
 - deadband
 - description
 - event-enable
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay
 - units
- 5. Proprietary properties: None
- 6. Range restrictions:
 - description limited to 50 octets in length
 - present-value limited by min-pres-value and max-pres-value properties
 - relinquish-default limited by min-pres-value and max-pres-value properties
 - notification-class must be valid notification-class
 - time-delay 0 to 4294967295

Analog Value (PID):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
 - description
 - reliability
- 4. Writeable properties:
 - description
- 5. Proprietary properties: None

6. Range restrictions: None

Analog Value (STAT):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - cov-increment
 - deadband
 - description
 - event-enable
 - event-time-stamps
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - reliability
 - time-delay
4. Writeable properties:
 - cov-increment
 - deadband
 - description
 - event-enable
 - high-limit
 - limit-enable
 - low-limit
 - notification-class
 - notify-type
 - out-of-service
 - time-delay
 - units
5. Proprietary properties: None
6. Range restrictions:

description	limited to 50 octets in length
notification-class	must be valid notification-class
time-delay	0 to 4294967295

Binary Value (BVP_CS):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - active-text
 - alarm-value
 - change-of-state-count
 - change-of-state-time
 - description
 - elapsed-active-time
 - event-enable
 - event-time-stamps
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class
 - notify-type
 - priority-array
 - reliability
 - relinquish-default
 - time-delay
 - time-of-active-time-reset
 - time-of-state-count-reset
4. Writeable properties:
 - active-text
 - alarm-value
 - change-of-state-count
 - description
 - elapsed-active-time
 - event-enable
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay
5. Proprietary properties: None
6. Range restrictions:

active-text	limited to 50 octets in length
change-of-state-count	0 to 4294967295
description	limited to 50 octets in length

elapsed-active-time	0 to 4294967295
inactive-text	limited to 50 octets in length
minimum-off-time	0 to 4294967295
minimum-on-time	0 to 4294967295
notification-class	must be valid notification-class
time-delay	0 to 4294967295

Binary Value (BVP_CS_Momentary):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - active-text
 - alarm-value
 - change-of-state-count
 - change-of-state-time
 - description
 - elapsed-active-time
 - event-enable
 - event-time-stamps
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class
 - notify-type
 - priority-array
 - reliability
 - relinquish-default
 - time-delay
 - time-of-active-time-reset
 - time-of-state-count-reset
4. Writeable properties:
 - active-text
 - alarm-value
 - change-of-state-count
 - description
 - elapsed-active-time
 - event-enable
 - inactive-text
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay

- 5. Proprietary properties:
 - 4176 cs_momentary_state optional
- 6. Range restrictions:
 - active-text limited to 50 octets in length
 - change-of-state-count 0 to 4294967295
 - description limited to 50 octets in length
 - elapsed-active-time 0 to 4294967295
 - inactive-text limited to 50 octets in length
 - notification-class must be valid notification-class
 - time-delay 0 to 4294967295

Binary Value (CLOCK):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
 - acked-transitions
 - active-text
 - alarm-value
 - change-of-state-count
 - change-of-state-time
 - description
 - elapsed-active-time
 - event-enable
 - event-time-stamps
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class
 - notify-type
 - priority-array
 - reliability
 - relinquish-default
 - time-delay
 - time-of-active-time-reset
 - time-of-state-count-reset
- 4. Writeable properties:
 - active-text
 - alarm-value
 - change-of-state-count
 - description
 - elapsed-active-time
 - event-enable
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class

- notify-type
- out-of-service
- present-value
- relinquish-default
- time-delay
- 5. Proprietary properties: None
- 6. Range restrictions:
 - active-text limited to 50 octets in length
 - change-of-state-count 0 to 4294967295
 - description limited to 50 octets in length
 - elapsed-active-time 0 to 4294967295
 - inactive-text limited to 50 octets in length
 - minimum-off-time 0 to 4294967295
 - minimum-on-time 0 to 4294967295
 - notification-class must be valid notification-class
 - time-delay 0 to 4294967295

Binary Value (MODULE ALARM):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
 - acked-transitions
 - alarm-value
 - description
 - event-enable
 - event-time-stamps
 - notification-class
 - notify-type
 - time-delay
- 4. Writeable properties:
 - alarm-value
 - event-enable
 - notification-class
 - notify-type
 - out-of-service
 - time-delay
- 5. Proprietary properties: None
- 6. Range restrictions:
 - notification-class must be valid notification-class
 - time-delay 0 to 4294967295

Binary Value (PAR):

- 7. Creatable? NO
- 8. Deletable? NO
- 9. Optional properties supported:

acked-transitions
active-text
alarm-value
change-of-state-count
change-of-state-time
description
elapsed-active-time
event-enable
event-time-stamps
inactive-text
minimum-off-time
minimum-on-time
notification-class
notify-type
priority-array
reliability
relinquish-default
time-delay
time-of-active-time-reset
time-of-state-count-reset

10. Writeable properties:

active-text
alarm-value
change-of-state-count
description
elapsed-active-time
event-enable
inactive-text
minimum-off-time
minimum-on-time
notification-class
notify-type
out-of-service
present-value
relinquish-default
time-delay

11. Proprietary properties: None

12. Range restrictions:

active-text	limited to 50 octets in length
change-of-state-count	0 to 4294967295
description	limited to 50 octets in length
elapsed-active-time	0 to 4294967295
inactive-text	limited to 50 octets in length
minimum-off-time	0 to 4294967295
minimum-on-time	0 to 4294967295
notification-class	must be valid notification-class
time-delay	0 to 4294967295

Binary Value (STAT):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - active-text
 - alarm-value
 - change-of-state-count
 - change-of-state-time
 - description
 - elapsed-active-time
 - event-enable
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class
 - notify-type
 - reliability
 - time-delay
 - time-of-active-time-reset
 - time-of-state-count-reset
 - event-time-stamp
4. Writeable properties:
 - active-text
 - alarm-value
 - change-of-state-count
 - description
 - elapsed-active-time
 - event-enable
 - inactive-text
 - minimum-off-time
 - minimum-on-time
 - notification-class
 - notify-type
 - out-of-service
 - time-delay
5. Proprietary properties: None
6. Range restrictions:

active-text	limited to 50 octets in length
change-of-state-count	0 to 4294967295
description	limited to 50 octets in length
elapsed-active-time	0 to 4294967295
inactive-text	limited to 50 octets in length
minimum-off-time	0 to 4294967295
minimum-on-time	0 to 4294967295
notification-class	must be valid notification-class

time-delay

0 to 4294967295

Calendar:

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - description
4. Writeable properties:
 - date-list
 - description
5. Proprietary properties: None
6. Range restrictions:
 - date-list limited to 30 BACnetCalendarEntry
 - description limited to 50 octets in length

Device:

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - active-cov-subscriptions
 - active-vt-sessions
 - align-intervals
 - apdu-segment-timeout
 - description
 - interval-offset
 - list-of-session-keys
 - local-date
 - local-time
 - location
 - max-segments-accepted
 - vt-classes-supported
 - utc-offset
 - max-master
 - max-info-frames
 - last-restart-reason
 - restart-notification-recipients
 - time-of-device-restart
 - time-synchronization-recipients
 - time-synchronization-interval
 - utc-time-synchronization-recipients
4. Writeable properties:
 - object-identifier
 - object-name
 - location
 - description
 - local-time

local-date
 utc-offset
 apdu-segment-timeout
 apdu-timeout
 number-of-apdu-retries
 max-master
 max-info-frames
 last-restart-reason
 restart-notification-recipients
 align-intervals
 time-synchronization-interval
 interval-offset
 time-synchronization-recipients
 utc-time-synchronization-recipients
 auto-identity-scheme
 auto-identity-base
 active-locale-code
 module-configuration
 archive-now-trigger
 lon-works-enable-metric-conversion
 ccn-address-element
 ccn-address-bus

5. Proprietary properties:

Property no.	Property name	Data Type
4145	active-locale-index	unsigned
4149	auto-identity-scheme	enumerated
4150	auto-identity-base	unsigned
4151	supported-locale-codes	array of unsigned
4152	active-locale-code	unsigned
4153	serial-number	char string
4154	module-configuration	octet string
4161	array-of-mstp-baud-rates	array of unsigned
4162	test-mode	enumerated
4166	download-id	char string
4167	file-store-size	unsigned
4801	ccn-address-element	unsigned
4802	ccn-address-bus	unsigned
4901	archive-valid-status	enumerated
4902	archive-now-trigger	bool
4920	lon-works-enable-metric-conversion	bool

6. Range restrictions:

Property no.	Property name	Property Restrictions	Data Type
	object-identifier	must be a valid device identifier	object identifier
	object-name	limited to 50 octets in length	char string
	location	limited to 50 octets in length	char string
	description	limited to 50 octets in length	char string
	utc-offset	-780 to 780	integer
	apdu-segment-timeout	0 to 4294967295	unsigned
	apdu-timeout	0 to 4294967295	unsigned
	number-of-apdu-retries	0 to 255	unsigned
	max-master	1 to 127	unsigned
	max-info-frames	0 to 65535	unsigned

Deadband
 Ramp_time

6. Range Restriction:

Property no.	Property name	Property Restrictions	Data Type
4163	Continuous_proportional	Can only be 0 or 1	Boolean
4164	Deadband	Must be >=0	Real
4165	Ramp_time	Must be >=0	Real

Multi-State Value (PAR):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - alarm-values
 - description
 - event-enable
 - event-time-stamps
 - fault-values
 - notification-class
 - notify-type
 - priority-array
 - reliability
 - relinquish-default
 - state-text
 - time-delay
4. Writeable properties:
 - alarm-values
 - description
 - event-enable
 - fault-values
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay
5. Proprietary properties: None
6. Range restrictions:
 - description limited to 50 octets in length
 - notification-class must be valid notification-class
 - present-value must be valid state
 - relinquish-default must be valid state
 - time-delay 0 to 4294967295

Multi-State Value (CLOCK):

1. Creatable? NO

2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - alarm-values
 - description
 - event-enable
 - event-time-stamps
 - fault-values
 - notification-class
 - notify-type
 - priority-array
 - reliability
 - relinquish-default
 - state-text
 - time-delay
4. Writeable properties:
 - alarm-values
 - description
 - event-enable
 - fault-values
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay
5. Proprietary properties: None
6. Range restrictions:

description	limited to 50 octets in length
notification-class	must be valid notification-class
present-value	must be valid state
relinquish-default	must be valid state
time-delay	0 to 4294967295

Multi-State Value (MSVP_CS):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - alarm-values
 - description
 - event-enable
 - event-time-stamps
 - fault-values
 - notification-class
 - notify-type

- priority-array
- reliability
- relinquish-default
- state-text
- time-delay
- 4. Writeable properties:
 - alarm-values
 - description
 - event-enable
 - fault-values
 - notification-class
 - notify-type
 - out-of-service
 - present-value
 - relinquish-default
 - time-delay

Multi-State Value (STAT):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
 - acked-transitions
 - alarm-values
 - description
 - event-enable
 - event-time-stamps
 - fault-values
 - notification-class
 - notify-type
 - reliability
 - state-text
 - time-delay
- 4. Writeable properties:
 - alarm-values
 - description
 - event-enable
 - fault-values
 - notification-class
 - notify-type
 - out-of-service
 - time-delay
- 5. Proprietary properties: None
- 6. Range restrictions:
 - description limited to 50 octets in length
 - notification-class must be valid notification-class
 - present-value must be valid state

time-delay

0 to 4294967295

Notification Class:

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - description
4. Writeable properties:
 - ack-required
 - description
 - priority
 - recipient-list
5. Proprietary properties: None
6. Range restrictions: None
 - description limited to 50 octets in length
 - recipient-list limited to 5 BACnetDestinations

Program:

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - description
 - description-of-halt
 - instance-of
 - program-location
 - reason-for-halt
 - reliability
4. Writeable properties:
 - description
 - program-change
 - program-location
5. Proprietary properties: None
6. Range restrictions:
 - description limited to 50 octets in length
 - program-location limited to 50 octets in length

Schedule (ENUM):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - description
 - exception-schedule
 - weekly-schedule
4. Writeable properties:

description	
effective-period	
exception-schedule	
priority-for-writing	
weekly-schedule	
list-of-prop-reference	
schedule-default	
reliability	
out-of-service	
5. Proprietary properties:	
schedule-names	
6. Range restrictions:	
description	limited to 50 octets in length
exception-schedule	limited to 30 BACnetSpecialEvents, each being limited to 6 BACnetTimeValues
present-value	0 to 4294967295
relinquish-default	0 to 4294967295
weekly-schedule	limited to 6 BACnetTimeValues per BACnetDailySchedule
schedule-default	0 to 4294967295
reliability	limited to 4 BACnetReliability
out-of-service	limited to Boolean
(557) schedule-names	limited to 800 octets in length

Schedule (UNS):

1. Creatable?	NO
2. Deletable?	NO
3. Optional properties supported:	
description	
exception-schedule	
weekly-schedule	
4. Writeable properties:	
description	
effective-period	
exception-schedule	
priority-for-writing	
weekly-schedule	
list-of-prop-reference	
schedule-default	
reliability	
out-of-service	
5. Proprietary properties:	
schedule-names	
6. Range restrictions:	
description	limited to 50 octets in length
exception-schedule	limited to 30 BACnetSpecialEvents, each being limited to 6 BACnetTimeValues
present-value	0 to 4294967295

relinquish-default	0 to 4294967295
weekly-schedule	limited to 6 BACnetTimeValues per BACnetDailySchedule
schedule-default	0 to 4294967295
reliability	limited to 4 BACnetReliability
out-of-service	limited to Boolean
(557) schedule-names	limited to 800 octets in length

Trend-log (COV or polled):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - client-cov-increment
 - cov-resubscription-interval
 - description
 - event-enable
 - event-time-stamps
 - log-device-object-property
 - log-interval
 - notification-class
 - notification-threshold
 - notify-type
 - records-since-notification
 - start-time
 - stop-time
 - last-notify-record
 - align-intervals
 - interval-offset
 - reliability
4. Writeable properties:
 - buffer-size
 - client-cov-increment
 - cov-resubscription-interval
 - Description
 - event-enable
 - log-enable
 - log-interval
 - notification-class
 - notification-threshold
 - notify-type
 - record-count
 - start-time
 - stop-time
 - stop-when-full
5. Proprietary properties: None
6. Range restrictions:

description	limited to 50 octets in length
log-interval	0 to 4294967295
notification-class	must be valid notification-class
notification-threshold	0 to 4294967295
record-count	can only be written to 0
total-record-count	can only be written to 0
reliability	limited to 4 BACnetReliability

Trend-log (of a non-BACnet property, COV or polled):

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
 - acked-transitions
 - client-cov-increment
 - cov-resubscription-interval
 - description
 - event-enable
 - event-time-stamps
 - last-notify-record
 - log-interval
 - notification-class
 - notification-threshold
 - notify-type
 - records-since-notification
 - start-time
 - stop-time
 - align-intervals
 - interval-offset
 - reliability
4. Writeable properties:
 - buffer-size
 - client-cov-increment
 - cov-resubscription-interval
 - description
 - event-enable
 - log-enable
 - log-interval
 - notification-class
 - notification-threshold
 - notify-type
 - record-count
 - start-time
 - stop-time
 - stop-when-full

5. Proprietary properties: None

6. Range restrictions:

description	limited to 50 octets in length
log_interval	0 to 4294967295
notification_class	must be valid notification_class
notification_threshold	0 to 4294967295
record_count	can only be written to 0
logging-type	limited to 3 BACnetLoggingType
align-intervals	limited to Boolean
interval-offset	0 to 4294967295 in hundredths of seconds
trigger	limited to Boolean
reliability	limited to 4 BACnetReliability

Trend-log (of a non-BACnet property, triggered):

1. Creatable? NO

2. Deletable? NO

3. Optional properties supported:

- acked-transitions
- client-cov-increment
- cov-resubscription-interval
- description
- event-enable
- event-time-stamps
- last-notify-record
- log-interval
- notification-class
- notification-threshold
- notify-type
- records-since-notification
- start-time
- stop-time
- reliability
- trigger

4. Writeable properties:

- buffer-size
- client-cov-increment
- cov-resubscription-interval
- description
- event-enable
- log-enable
- notification-class
- notification-threshold
- notify-type
- record-count
- start-time
- stop-time

stop-when-full
trigger

- 5. Proprietary properties: None
- 6. Range restrictions:

description	limited to 50 octets in length
log_interval	0 to 4294967295
notification_class	must be valid notification_class
notification_threshold	0 to 4294967295
record_count	can only be written to 0
logging-type	limited to 3 BACnetLoggingType
align-intervals	limited to Boolean
interval-offset	0 to 4294967295 in hundredths of seconds
trigger	limited to Boolean
reliability	limited to 4 BACnetReliability

Proprietary Object, Network Port:

- 1. Creatable? No
- 2. Deletable? No
- 3. Optional properties supported:
 - ip-multicast-address
 - ip-subnet-mask
 - ip-default-gateway
 - max-master
 - max-info-frames
 - time-sync-interval
- 4. Writable properties:
 - network-number
 - mac-address
 - ip-multicast-address
 - ip-subnet-mask
 - ip-default-gateway
 - instance-of
 - auto-identity-base
 - auto-identity-scheme
 - network-port-base
 - max-master
 - max-info-frames
 - device-time-sync-mode
 - time-sync-interval
- 5. Conditionally writeable properties where not otherwise required by the standard: None
- 6. Proprietary properties:
 - network-type
 - network-number
 - mac-address
 - ip-multicast-address
 - ip-subnet-mask
 - ip-default-gateway
 - auto-identity-base

auto-identity-scheme
network-port-base
device-time-sync-mode

7. Range Restriction:

Property no.	Property name	Property Restrictions	Data Type
624	network-type		Unsigned
622	network-number	0 – 65535	Unsigned
621	mac-address	limited to 6 octets in length	Chrstr
607	ip-multicast-address	limited to 4 octets in length	Chrstr
608	ip-subnet-mask	limited to 4 octets in length	Chrstr
601	ip-default-gateway	limited to 4 octets in length	Chrstr
4150	auto-identity-base	0 - 4294967295	Unsigned
4149	auto-identity-scheme	0 - 255	Enum
600	network-port-base		Chrstr
660	device-time-sync-mode	0 - 2	Enum