

BACnet Protocol Implementation Conformance Statement  
 Carrier VAV Single Duct



Date: **5/23/2013**

Vendor Name: **Carrier**

Product Name: **VAV Single Duct**

Product Model Number: **OPN-VAVB1**

Applications Software Version: **<depends on application>** Firmware Revision: **5.54**

BACnet Protocol Revision: **9**

**Product Description:**

The VAV Single Duct Zone Controller provides zone level temperature and air quality control for a variety of pressure-independent VAV applications. This advanced controller features an integral actuator for easy installation onto single duct air terminals. It also features native BACnet communications and plug-and-play connectivity to the Carrier i-Vu Open Control System. The Carrier i-Vu Open Control System combines state-of-the-art Carrier equipment, plug-and-play controllers, and the powerful, web-based i-Vu user interface to form a cohesive, intuitive, and fully-integrated BACnet® Building Automation System.

**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-B
DS-WPM-B				DM-UTC-B
DS-COV-A				DM-RD-B
DS-COV-B				DM-LM-B
DS-COVU-A				DM-R-B
DS-COVU-B				

**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) \_\_\_\_\_
- 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.

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> ANSI X3.4         | <input checked="" type="checkbox"/> IBM™/Microsoft™ DBCS | <input checked="" type="checkbox"/> ISO 8859-1 |
| <input checked="" type="checkbox"/> ISO 10646 (UCS-2) | <input checked="" type="checkbox"/> ISO 10646 (UCS-4)    | <input checked="" type="checkbox"/> 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:

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
  - max-pres-value
  - min-pres-value
  - notification-class
  - notify-type
  - reliability
  - resolution
  - time-delay
  - update-interval
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: None
6. Range restrictions:

description	limited to 50 octets in length
device-type	limited to 50 octets in length
present-value	limited by min-pres-value and max-pres-value properties
notification-class	must be valid notification-class
time-delay	0 to 4294967295

## 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	optional/writable	cs-comb-algorithm
4169	optional/writable	cs-disp-source
4170	optional/writable	cs-sens-enable-arr
4173	optional/	cs-corrected-value-arr
4171	optional	cs-sens-status-arr
4172	optional/writable	cs-sens-calib-arr
- 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 Input (TLO):**



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
  - max-pres-value
  - min-pres-value
  - notification-class
  - notify-type
  - reliability
  - resolution
  - time-delay
  - update-interval
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: None
6. Range restrictions:

description	limited to 50 octets in length
device-type	limited to 50 octets in length
present-value	limited by min-pres-value and max-pres-value properties
notification-class	must be valid notification-class
time-delay	0 to 4294967295

### **Analog Input (PTA):**

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
- max-pres-value
- min-pres-value
- notification-class
- notify-type
- reliability
- resolution
- time-delay
- update-interval
- 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: None
- 6. Range restrictions:
  - description                   limited to 50 octets in length
  - device-type                   limited to 50 octets in length
  - present-value                limited by min-pres-value and max-pres-value properties
  - notification-class           must be valid notification-class
  - time-delay                    0 to 4294967295

**Analog Input (RS):**

- 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
- max-pres-value
- min-pres-value
- notification-class
- notify-type
- reliability
- resolution
- time-delay
- update-interval
- 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: None
- 6. Range restrictions:

description	limited to 50 octets in length
device-type	limited to 50 octets in length
present-value	limited by min-pres-value and max-pres-value properties
notification-class	must be valid notification-class
time-delay	0 to 4294967295

### **Analog Output:**

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
- max-pres-value
- min-pres-value
- 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
  - present-value
  - relinquish-default
  - time-delay
  - units
- 5. Proprietary properties: None
- 6. Range restrictions:
  - description limited to 50 octets in length
  - device-type 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 Output (FM):**

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
- max-pres-value
- min-pres-value
- 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
  - present-value
  - relinquish-default
  - time-delay
  - units
- 5. Proprietary properties: None
- 6. Range restrictions:
  - description limited to 50 octets in length
  - device-type 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 Output (PWM):**

- 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
- max-pres-value
- min-pres-value
- 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
  - present-value
  - relinquish-default
  - time-delay
  - units
- 5. Proprietary properties: None
- 6. Range restrictions:
  - description limited to 50 octets in length
  - device-type 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 (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

### **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 (RS):**

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

**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 Input:**

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
  - device-type
  - elapsed-active-time



- event-enable
- event-time-stamps
- inactive-text
- notification-class
- notify-type
- reliability
- time-delay
- time-of-active-time-reset
- time-of-state-count-reset
- 4. Writeable properties:
  - active-text
  - alarm-value
  - change-of-state-count
  - description
  - device-type
  - elapsed-active-time
  - event-enable
  - inactive-text
  - notification-class
  - notify-type
  - out-of-service
  - polarity
  - 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
device-type	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 Output:

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
  - acked-transitions
  - active-text
  - change-of-state-count
  - change-of-state-time
  - description
  - device-type
  - elapsed-active-time
  - event-enable
  - event-time-stamps





- feedback-value
- 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
- 4. Writeable properties:
  - active-text
  - change-of-state-count
  - description
  - device-type
  - elapsed-active-time
  - event-enable
  - inactive-text
  - minimum-off-time
  - minimum-on-time
  - notification-class
  - notify-type
  - out-of-service
  - polarity
  - 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
device-type	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):**

- 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 optional cs\_momentary\_state
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
  - apdu-segment-timeout
  - description
  - 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
  - time-of-device-restart
  - restart-notification-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
  - auto-identity-scheme
  - auto-identity-base
  - active-locale-code
  - module-configuration
  - archive-now-trigger
  - lon-works-enable-metric-conversion
- 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
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
4149	auto-identity-scheme	0 to 255	enumerated
4150	auto-identity-base	0 to 4294967295	unsigned
4152	active-locale-code		unsigned
4154	module-configuration	0 to 16 in length	octet string

**File:**

1. Creatable? NO
2. Deletable? NO
3. Optional properties supported:
  - description
4. Writeable properties:
  - archive
  - description
  - file-type
  - file-size
  - modification-date
  - read-only
5. Proprietary properties: None
6. Range restrictions:
  - description limited to 50 octets in length
  - file-type limited to 50 octets in length

**Loop Object (BACnet PID):**

1. Creatable? No
2. Deletable? No



3. Optional properties supported:
  - Description
  - Update\_interval
  - Proportional\_constant
  - Proportional\_constant\_units
  - Integral\_constant
  - Integral\_constant\_units
  - Derivative\_constant
  - Derivative\_constant\_units
  - Bias
  - COV\_increment

4. Writable properties:
  - description
  - Update\_interval
  - Action
  - Proportional\_constant
  - Integral\_constant
  - Derivative\_constant
  - Bias

5. Proprietary properties:
  - Continuous\_proportional
  - Deadband
  - Ramp\_time

6. Range Restriction:
 

Property no.	Property name	Property Restrictions	DataType
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 (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
- 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 (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 (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: None
- 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

### 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: None
- 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

**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, AirFlow:

1. Creatable? No
2. Deletable? No
3. Optional properties supported:
  - description
  - device-type
  - profile-name
  - tab-tech-name
  - tab-org-name
  - display-name
  - max-cool-flow
  - max-cool-flow-ovr
  - max-heat-flow
  - min-occ-flow



min-occ-flow-ovr  
min-unocc-flow  
tabs-pars-seal  
min-aux-heat-flow  
flow-at-one-inch  
flow-calibration  
sens-calibration  
lock-flags  
flow-setpt-lock  
aux-heat-lock  
damper-lock  
fan-lock  
auto-zero  
tab-mode  
last-tab-date  
air-source-obj-id  
par-prg-dev-id  
par-prg-obj-id  
loop-config  
sens-config  
damp-config  
status-flags  
reliability  
occupied-mode  
heat-mode  
fan-outpt  
cooling  
heating  
aux-heat  
damper  
flow-actual  
flow-setpoint  
air-flow-obj-id  
own-prg-obj-id  
flow-rawpct  
flow-rawsetpt  
moves-today  
moves-yesterday  
prop-stat-flags  
units  
ovr-flags  
lock-flags-bool  
prop-stat-flags-bool  
baf-version

4. Writable properties:
- description
  - device-type
  - profile-name
  - tab-tech-name
  - tab-org-name
  - display-name
  - max-cool-flow
  - max-cool-flow-ovr
  - max-heat-flow
  - min-occ-flow



min-occ-flow-ovr  
min-unocc-flow  
tab-pars-seal  
min-aux-heat-flow  
flow-at-one-inch  
flow-calibration  
sens-calibration  
flow-setpt-lock  
aux-heat-lock  
damper-lock  
fan-lock  
auto-zero  
tab-mode  
last-tab-date  
lock-flags-bool

5. Proprietary properties:

max-cool-flow  
max-heat-flow  
min-occ-flow  
min-unocc-flow  
min-aux-heat-flow  
flow-at-one-inch  
flow-calibration  
sens-calibration  
aux-heat-lock  
damper-lock  
flow-setpt-lock  
auto-zero  
tab-mode  
lock-flags  
par-prg-dev-id  
par-prg-obj-id  
air-source-obj-id  
occupied-mode  
heat-mode  
cooling  
heating  
aux-heat  
damper  
flow-actual  
flow-setpoint  
air-flow-obj-id  
loop-config  
sens-config  
damp-config  
flow-rawpct  
flow-rawsetpt  
moves-today  
moves-yesterday  
fan-lock  
fan-outpt  
prop-stat-flags  
tab-tech-name  
tab-org-name



last-tab-date  
display-name  
own-prg-obj-id  
ovr-flags  
max-cool-flow-ovr  
min-occ-flow-ovr  
tab-pars-seal  
lock-flags-bool  
prop-stat-flags-bool  
baf-version

6. Range Restriction:

Property no.	Property name	Property Restrictions	Data Type
4132	tab-tech-name	limited to 50 octets in length	Chrstr
4133	tab-org-name	limited to 50 octets in length	Chrstr
4135	display-name	limited to 50 octets in length	Chrstr
4096	max-cool-flow	Float – Standard Bacnet	Real
4138	max-cool-flow-ovr	Float – Standard Bacnet	Real
4097	max-heat-flow	Float – Standard Bacnet	Real
4098	min-occ-flow	Float – Standard Bacnet	Real
4139	min-occ-flow-ovr	Float – Standard Bacnet	Real
4099	min-unocc-flow	Float – Standard Bacnet	Real
4140	tab-pars-seal	Date/Time – Standard Bacnet	Date/Time
4100	min-aux-heat-flow	Float – Standard Bacnet	Real
4101	flow-at-one-inch	Float – Standard Bacnet	Real
4102	flow-calibration	Float – Standard Bacnet	Real(Array of 4 values)
4103	sens-calibration	Float – Standard Bacnet	Real(Array of 4 values)
4106	flow-setpt-lock	Float – Standard Bacnet	Real
4104	aux-heat-lock	Float – (only goes 0 – 100)	Real
4105	damper-lock	Float – (only goes 0 - 100)	Real
4129	fan-lock	Boolean – Standard Bacnet	Boolean
4107	auto-zero	Boolean – Standard Bacnet	Boolean
4108	tab-mode	0-255 (Only 0 -8 is defined)	Byte
4134	last-tab-date	Date/Time – Standard Bacnet	Date/Time
4141	lock-flags-bool		BitStr
	description	limited to 50 octets in length	ChrStr
	device-type	limited to 50 octets in length	ChrStr
	profile-name	limited to 50 octets in length	ChrStr

**Proprietary Object, Bypass:**

1. Creatable? No
2. Deletable? No
3. Optional properties supported:
  - description
  - device-type
  - profile-name
  - tab-tech-name
  - tab-org-name
  - display-name
  - tabs-pars-seal
  - lock-flags
  - damper-lock
  - auto-zero
  - tab-mode



last-tab-date  
air-source-obj-id  
par-prog-dev-id  
par-prog-obj-id  
sens-config  
damp-config  
application-instance  
status-flags  
reliability  
own-prg-obj-id  
flow-rawpct  
moves-today  
moves-yesterday  
prop-stat-flags  
units  
ovr-flags  
lock-flags-bool  
byp-dsp-lock  
prop-stat-flags-bool  
byp-version  
byp-commanded-position  
byp-ahu-mode  
byp-lat-override  
byp-damper-motion  
byp-damper  
byp-duct-static  
byp-wkg-dsp  
byp-cal-active  
byp-dsp-wire  
byp-lat-wire  
byp-duct-sp-setpoint  
byp-lat-setpoint  
byp-calibration-setpt  
byp-dsp-setpt-ovr  
byp-lat-setpt-ovr  
byp-cal-setpt-ovr  
air-source-dev-id  
air-source-dev-id

4. Writable properties:
- description
  - device-type
  - profile-name
  - tab-tech-name
  - tab-org-name
  - display-name
  - tabs-pars-seal
  - lock-flags
  - damper-lock
  - auto-zero
  - tab-mode
  - last-tab-date
  - application-instance
  - reliability
  - lock-flags-bool
  - byp-dsp-lock
  - byp-duct-sp-setpoint



byp-lat-setpoint  
 byp-calibration-setpt  
 byp-dsp-setpt-ovr  
 byp-lat-setpt-ovr  
 byp-cal-setpt-ovr

5. Proprietary properties:

auto-zero  
 damper-lock  
 tab-mode  
 par-prg-dev-id  
 par-prg-obj-id  
 air-source-obj-id  
 lock-flags  
 sens-config  
 damp-config  
 flow-rawpct  
 moves-today  
 moves-yesterday  
 prop-stat-flags  
 tab-tech-name  
 tab-org-name  
 last-tab-date  
 display-name  
 own-prg-obj-id  
 ovr-flags  
 tab-pars-seal  
 lock-flags-bool  
 prop-stat-flags-bool  
 application-instance  
 byp-version  
 byp-dsp-lock  
 byp-commanded-position  
 byp-ahu-mode  
 byp-lat-override  
 byp-damper-motion  
 byp-damper  
 byp-duct-static  
 byp-wkg-dsp  
 byp-cal-active  
 byp-dsp-wire  
 byp-lat-wire  
 byp-duct-sp-setpoint  
 byp-lat-setpoint  
 byp-calibration-setpt  
 byp-dsp-setpt-ovr  
 byp-lat-setpt-ovr  
 byp-cal-setpt-ovr

6. Range Restriction:

Property no.	Property name	Property Restrictions	Data Type
4105	auto-zero		Boolean
4107	damper-lock	0 to 100.0	Real
4108	tab-mode	0 to 255	Unsigned
4109	par-prg-dev-id		Object ID
4110	par-prg-obj-id		Object ID
4111	air-source-obj-id		Object ID
4121	lock-flags		BitStr



4123	sens-config	0 to 255	Unsigned
4124	damp-config	0 to 255	Unsigned
4125	flow-rawpct		Real
4127	moves-today	0 to 65535	Unsigned
4128	moves-yesterday	0 to 65535	Unsigned
4131	prop-stat-flags		BitStr
4132	tab-tech-name	limited to 50 octets in length	ChrStr
4133	tab-org-name	limited to 50 octets in length	ChrStr
4134	last-tab-date		Date/Time
4135	display-name	limited to 50 octets in length	ChrStr
4136	own-prg-obj-id		Object ID
4137	ovr-flags		Unsigned
4140	tab-pars-seal	Date/Time – Standard Bacnet	Date/Time
4141	lock-flags-bool		BitStr
4142	prop-stat-flags-bool	Boolean – Standard Bacnet	Boolean
4156	application-instance		Unsigned
4703	byp-version		Unsigned
4704	byp-dsp-lock		Real
4705	byp-commanded-position		Real
4706	byp-ahu-mode		Real
4707	byp-lat-override		Real
4708	byp-damper-motion		Real
4709	byp-damper		Real
4710	byp-duct-static		Real
4711	byp-wkg-dsp		Real
4712	byp-cal-active	Boolean – Standard Bacnet	Boolean
4713	byp-dsp-wire		Real
4714	byp-lat-wire		Real
4715	byp-duct-sp-setpoint	0.0 to 2.0	Real
4716	byp-lat-setpoint	0.0 to 2.0	Real
4717	byp-calibration-setpt	0.0 to 2.0	Real
4718	byp-dsp-setpt-ovr	0.0 to 2.0	Real
4719	byp-lat-setpt-ovr	0.0 to 2.0	Real
4720	byp-cal-setpt-ovr	0.0 to 2.0	Real
	description	limited to 50 octets in length	ChrStr
	device-type	limited to 50 octets in length	ChrStr
	profile-name	limited to 50 octets in length	ChrStr

**Proprietary Object, Collector:**

1. Creatable? No
2. Deletable? No
3. Optional properties supported:
  - application-id
  - application-instance
  - update-time
  - expiration-time
  - coll-max-number-of-providers
  - coll-number-of-providers
  - coll-number-of-provider-values
  - coll-feedback-values
4. Writable properties:
  - application-instance
  - coll-number-of-providers
5. Proprietary properties:
  - application-id





application-instance  
update-time  
expiration-time  
coll-max-number-of-providers  
coll-number-of-providers  
coll-number-of-provider-values  
coll-feedback-values

6. Range Restriction:

<b>Property no.</b>	<b>Property name</b>	<b>Property Restrictions</b>	<b>Data Type</b>
4155	application-id	1 to 65535	Unsigned
4156	application-instance	1 to 65535	Unsigned
4157	update-time	0 to 65535	Unsigned
4158	expiration-time	0 to 65535	Unsigned
4601	coll-max-number-of-providers	1 to 64	Unsigned
4602	coll-number-of-providers	0 to 64	Unsigned
4603	coll-number-of-provider-values	1 to 24	Unsigned
4604	coll-feedback-values	1 to 8	Unsigned



**Proprietary Object, Provider:**

- 4. Creatable? No
- 5. Deletable? No
- 6. Optional properties supported:
  - application-id
  - application-instance
  - update-time
  - expiration-time
  - prov-number-of-output-elements
  - prov-number-of-feedback-elements
  - prov-collector-network
  - prov-collector-address
- 4. Writable properties:
  - application-instance
  - prov-collector-network
  - prov-collector-address
- 5. Proprietary properties:
  - application-id
  - application-instance
  - update-time
  - expiration-time
  - prov-number-of-output-elements
  - prov-number-of-feedback-elements
  - prov-collector-network
  - prov-collector-address
- 6. Range Restriction:

Property no.	Property name	Property Restrictions	Data Type
4155	application-id	1 to 65535	Unsigned
4156	application-instance	1 to 65535	Unsigned
4157	update-time	0 to 65535	Unsigned
4158	expiration-time	0 to 65535	Unsigned
4611	prov-number-of-output-elements	1 to 24	Unsigned
4612	prov-number-of-feedback-elements	1 to 8	Unsigned
4613	prov-collector-network	0 to 65535	Unsigned
4614	prov-collector-address	0 to 255	Unsigned