

**INTERPRETATION IC 135-2010-12 OF
ANSI/ASHRAE STANDARD 135-2010 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

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Reference: This request for interpretation refers to ANSI/ASHRAE Standard 135-2010, Clause 12, regarding the Object_Identifier property and the instance number 4194303.

Background: Chapter 12 (page 144) states that "No object shall have an Object_Identifier with an instance number of 4194303. Object properties that contain BACnetObjectIdentifiers may use 4194303 to indicate that the property is not initialized."

Loop-Object Properties:

- Manipulated_Variable_Reference
- Controlled_Variable_Reference
- Setpoint_Reference

Loop-Object implementation may or may not support references to external BACnet objects for the Manipulated_Variable_Reference, Controlled_Variable_Reference and Setpoint_Reference. In case the Loop-object does not support either of the three properties it is not clearly specified how a missing (non-existent) reference may be presented.

The foreword of Chapter 12 allows for BACnetObjectIdentifiers to be represented by 4.194.303 in case it is not associated to an object, but the data-type of the manipulated variable reference and the controlled variable reference properties is BACnetObjectPropertyReference.

We noticed that some implementations use the object identifier portion of the BACnetObjectPropertyReference set to 4.194.303, but we did not find any reference if this is allowed or not.

The setpoint is already a sequence with one optional argument (the BACnetObjectPropertyReference), but the two others are not.

Interpretation #1: Manipulated_Variable_Reference and Controlled_Variable_Reference are allowed to contain the object instance 4194303.

Question #1: Is this interpretation correct?

Answer #1: Yes

Interpretation #2: When either of these properties contains this 4194303 as the object instance, it indicates that there is no related referenced object.

Question #2: Is this interpretation correct?

Answer #2: Yes

Interpretation #3: It is a local matter whether, or not, the existence of 4194303 in either of these properties results in the Loop object stopping operation.

Question #3: Is this interpretation correct?

Answer #3: Yes