

**INTERPRETATION IC 135-2012-7 OF
ANSI/ASHRAE STANDARD 135-2012 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

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Request from: Daniel Evers (Daniel.Evers@gfr.de), GFR - Gesellschaft für Regelungstechnik und Energieeinsparung mbH, Kapellenweg 42, Germany D-33415.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE 135-2012, Clause 15.10.1.3 and 15.10.2, relating to error handling of WritePropertyMultiple Service.

Background: As stated in Clause 15.10.1.3.1, if a syntax error is encountered in a WritePropertyMultiple-Request message after one or more properties have been already successfully written a Result(-) have to be returned with error class SERVICES and error code INVALID_TAG.

In addition to the 'Error Type' member Result(-) includes the member 'First Failed Write Attempt' which is described in Clause 15.10.1.3.2 and conveys the object property reference of the error causing item.

If one or more properties have been already successfully written and a syntax error occurs during decoding of the next object identifier, property identifier or property array index then there is no reliable object property reference for the 'First Failed Write Attempt' member of the Result(-) response.

Because 'First Failed Write Attempt' is a mandatory member it is not possible to omit it. A BACnet-Reject-PDU could be returned but Clause 15.10.2, paragraph 3 states:

"A BACnet-Reject-PDU shall be issued only if no write operations have been successfully executed, indicating that the service request was rejected in its entirety. If any of the write operations contained in the 'List of Write Access Specifications' have been successfully executed, a Result(-) response indicating the reason for the failure shall be issued as described above."

It is not clear how to handle the situation described above.

Interpretation: Regardless of Clause 15.10.2, paragraph 3, a BACnet-Reject-PDU shall be issued if a syntax error is detected and the object property reference is not reliable. If the object property reference is reliable then a Result(-) response shall be returned as described in Clause 15.10.1.3.

Question: Is this interpretation correct?

Answer: No

Comments:

While the standard is clear that a WritePropertyMultiple-Error shall be returned, the standard does not rule on what the BACnetObjectPropertyReference should contain in this situation.

The committee suggests that when this condition occurs, implementers set the object instance to 4194303. The values for all other parts of the firstFailedWriteAttempt are a local matter.

The committee will draft a change proposal to address this issue within the standard in a future revision.