INTERPRETATION IC135-2008-11 OF
ANSI/ASHRAE STANDARD ADDENDUM 135-2008p BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks

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Request from: Klaus Wagner(klaus.wagner@ch.sauter-bc.com), Fr. Sauter AG, Switzerland, Im Surinam 55.

Reference: This request for interpretation refers to the requirements presented in Addendum p to ANSI/ASHRAE Standard 135-2008, Section 13.3.X, relating to the CHANGE_OF_STATUS_FLAGS Algorithm.

Background: Section 13.3.X (page 10 of Addendum p to 135-2008) describes: "After the algorithm is in the OFFNORMAL state, if the set of selected flags in the referenced property that have a value of TRUE changes, then this algorithm shall generate another TO-OFFNORMAL transition."

The section "if the set of selected flags in the referenced property that have a value of TRUE changes" can be interpreted in several ways.

I assume that interpretation number 1 below is correct, that a new TO-OFFNORMAL transition is triggered, if any True-to-False transition or False-to-True transition of any bit in the selected set occurs and at least one flag of the set of selected flags in the referenced property has still the value of TRUE. If the set of flags is changed a new TO-OFFNORMAL shall be issued if the set of TRUE values changes, (a TRUE flag is added or a TRUE flag is omitted and at least one flag in the referenced property has the value of TRUE).

Interpretation No.1: If at least **one flag** of the set of selected flags in the referenced property will change whether to TRUE or to FALSE (and at least one referenced property within the selected flags still has the value of TRUE) a new TO-OFFNORMAL event shall be issued.

Question No.1: Is this interpretation correct?

Answer No.1: Yes.

Comments No.1: None.

Interpretation No.2: If the "set" has the value of TRUE and **the set** itself changes (increase or decrease of the set) a new TO-OFFNORMAL shall be issued regardless of the new value of the set of selected flags.

Question No.2: Is this interpretation correct?

Answer No.2: No.

Comments No.2: It is defined to be the set of "selected flags that are true". If you add a new flag to the collection of selected flags, but it is not true, then the set of "selected flags that are true" has not changed.

Interpretation No.3: If any True-to-False transition or False-to-True transition occurs of any bit in the selected set, or the selected set is increased or decreased, because Selected_Flags changes, would generate another transition to OFF-NORMAL. Even if there is a transition to OFF-NORMAL when the last of the flags completes a True-to-False transition and all flags are FALSE (though there are no TRUE flags left, at that moment the set of selected flags in the referenced property that have a value of TRUE changes).

Question No.3: Is this interpretation correct?

Answer No.3: No. When the set of "selected flags that are true" is empty, then the transition to normal occurs before the check for set changes occurs.

Comments No.3: None.