INTERPRETATION IC 135-2016-9 OF
ANSI/ASHRAE STANDARD 135-2016 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks

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Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2016, Clause K.2.4 AE-ACK-A, and Clause K.2.2 AE-N-I-B, regarding date and time synchronization requirements.

Background: The current testing standard, in Alarm and Event tests uses the wording

> "(TRANSMIT TimeSynchronization-Request,
> 'Time' = (any time...)) |
> (TRANSMIT UTCTimeSynchronization-Request,
> 'Time' = (any time...)) |
> MAKE (the local date and time = ...)"

That would seem to imply devices which can keep time but which cannot execute TimeSynchronization nor execute UTCTimeSynchronization will be acceptable if these synchronize time on internal clocks using some other means (such as NNTP).

The 135-2016 wording within three SCHED BIBBs is more explicit:

K.3.2 BIBB - Scheduling-Weekly Schedule-Internal-B (SCHED-I-B)
Devices claiming conformance to SCHED-I-B shall also support either DM-TS-B or DM-UTC-B.

K.3.4 BIBB - Scheduling-Weekly Schedule-Readonly-B (SCHED-R-B)
Each device claiming conformance to SCHED-R-B shall be capable of possessing at least one Schedule object, support DS-RP-B and either DM-TS-B or DM-UTC-B.

K.3.8 BIBB - Scheduling-Weekly Schedule-Internal-B (SCHED-WS-I-B)
Devices claiming conformance to SCHED-WS-I-B shall also support either DM-TS-B or DM-UTC-B.

Interpretation: The required behavior in a device that implements AE-ACK-A or AE-N-I-B and which can keep time, and so emits timestamps of the BACnetDateTime form, is that it is acceptable even if they cannot execute TimeSynchronization nor execute UTCTimeSynchronization, if the device synchronizes time on internal clocks using some other means (such as NNTP).

Question: Is this Interpretation correct?

Answer: Yes

Comments: The standard does not require the execution of time synchronization services for AE-ACK-A or AE-N-I-B, even if the Local_Date and Local_Time properties are supported.