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

Approval Date: October 26, 2017

Request from: Duffy O’Craven, Quinda Inc., 61 Hancock St., Somerville MA 02144, USA

Reference: This request for interpretation refers to the requirements presented in
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.