

**INTERPRETATION IC 135-2012-1 OF
ANSI/ASHRAE STANDARD 135-2012 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

Approval Date: May 9, 2013

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Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE 135-2012, Clause 12.25.14, relating to recording time-change events in trendlog logbuffer.

Background: time-change: This choice represents a change in the clock setting in the device; it records the number of seconds by which the clock changed. If the number is not known, such as when the clock is initialized for the first time, the value recorded shall be zero. This record shall be recorded after changing the local time of the device and the timestamp shall reflect the new local time of the device.

The issue in question is what a device is supposed and allowed to record in the logbuffer of a trendlog object when it receives a time synchronization request that will in effect change the internal clock by an amount of less than half a second. An implementation chooses to record this situation in the logbuffer as a time-change entry with number of seconds set to zero. This behavior does represent what actually happens and it seems compliant with the wording from Standard 135-2012.

The potential problem is, that a client, that reads and presents the log data cannot distinguish this case of a time-sync with the time-difference of less than a second from the case of a time-sync with an unknown number of seconds.

Interpretation: A server is allowed to record a time-change event with the time-difference of less than a second as an entry of type time-change with a value of zero for the number of seconds. A client device that reads and presents the trend-data from that client is supposed to be able to handle these time-change entries in an appropriate way.

Question: Is this interpretation correct?

Answer: No.

Comments: If the difference in time is known and not 0.0 the server shall record the difference, as a real number, in the time change record in the Log.

The client must expect and handle a time change value of 0.0 in a log. What the client does with this entry is a local matter.