INTERPRETATION IC 135-2012-11 OF
ANSI/ASHRAE STANDARD 135-2012 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 135-2012, Clause 12.25.14, regarding all logging objects (TL, TLM, EL).

Background: The standard does not clearly specify if purging an empty logging object shall be recorded using the BUFFER_PURGED log-datum or not.

Assuming the log-buffer is empty, record-count equals zero and logging is disabled. This situation may appear if the device starts up using factory settings.

If a write to record-count using the value zero is performed in this empty state the standard does not rule if this has to be recorded using a BUFFER_PURGED event or not. Since the buffer was empty before and is still empty the buffer was not modified and so was not actually purged.

The last sentence describing the BUFFER_PURGED event in Clause 12.25.14 though states that this event has to be recorded even in case Trend Log is disabled or is outside the range from StartTime to StopTime.

Interpretation: Purging an empty buffer of a logging object is not required to be recorded using a BUFFER_PURGED event.

Question: Is this interpretation correct?

Answer: No

Comments:
The action of "purging" the buffer is a result of setting Record_Count to zero, OR changing the Log_DeviceObjectProperty reference. In either case 12.25.14 is clear that a BUFFER_PURGED record shall be created.

It is possible that a "newly created" Trend Log may be completely empty without such a log record, however subsequent writing of zero to Record_Count or changes to Log_DeviceObjectProperty shall behave as 12.25.14 indicates.