INTERPRETATION IC 135-2012-4 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 135-2012, Clause 12.25.10, relating to details on client behavior for retrieving external property values by COV or polling.

Background: When looking at details of tests for SubscribeCOV from trendlog objects I started to wonder whether some of these details can be implemented in a consistent way at all.

A trend-log object has properties for controlling COV behavior if it references external properties and there are tests to verify the exact behaviour. There would be a resubscription interval for example. The 135-2012 mandates a device should issue SCOV requests with a LifeTime of exactly twice the Resubscription interval.

Now imagine the device has more than one client reference to the same external property. Lets say several TrendLog objects are configured to collect data from the same external property. These TrendLog objects might have different settings for the resubscription interval or for the clientCOV-increment for that matter. What ever the device does in such a situation it is due to fail in some of the tests!

For my feeling the rules in the 135-2012 for how the device is supposed to collect data for trendlog objects are too strict. There should be more room for intelligent client behavior. If the device has several internal client references to external properties it should be allowed to bundle these in a intelligent way to satisfy the internal "consumers" with the least possible external traffic. For example it might pick the smallest of several configured COV-increments or the shortest configured resubscription-interval for its requests.

Interpretation: A device, that has several references to external properties is not required to strictly follow properties like “resubscription interval”. It is a local matter how the device handles conflicting requirements to its client behavior.

Question: Is this interpretation correct?

Answer: No.

Comments: Trend Log objects are required to abide by their COV client configuration parameters. When there are multiple Trend Log objects using COV to monitor the same remote property, each Trend Log will need a separate subscription unless all configuration parameters are identical.