

Clarification Request

References: BTL Specified Tests 7.3.2.24.X3 COV-Sampling Verification Test

Background / Proposed Solution:

There is a BTL Specified Test 7.3.2.24.X3 **COV-Sampling Verification Test**

Purpose: To verify logged samples are based on COV rather than by interval.

Test Concept: The trend log is configured to log based on COV increment. Logging is enabled. After a period of time the buffer is checked to verify the data in the buffer is based on the COV values and not on the set interval.

Configuration Requirements: The IUT shall be configured such that the monitored object has COV configured or the Client_COV_Increment shall be configured or it is not monitoring a REAL property.

Test Steps:

1. WRITE Log-Enable = FALSE
2. WRITE Record_Count = 0
3. WRITE Log_Interval = 0
4. WRITE Log_Enable = TRUE
5. MAKE monitored property change its value
6. WAIT (60 seconds)
7. MAKE monitored property change its value
8. WAIT (90 seconds)
9. MAKE monitored property change its value
10. WAIT (40 seconds)
11. VERIFY (Log_Buffer contains 3 or 4 data entries, and time between each sample is not equal)

Note that the test does not direct the tester to put the IUT into Logging_Type mode COV explicitly, when at some protocol revision levels, it should do so. Instead step 3 tries to employ a side-effect, that might or might not work, to do so implicitly.

Since Log_Interval can be read-only when Logging_Type has the value TRIGGERED, the write of 0 to Log_Interval at step 3 can fail because it is read-only when Logging_Type has the value TRIGGERED. It can also fail because the value of 0 is inappropriate/forbidden at some protocol revision levels, when in Logging_Type mode POLLED, and the value of 0 is forbidden at other protocol revision levels, when COV_Resubscription_Interval is not present.

In 135-2008, the relevant section 12.25.9 Log_Interval contains: To maintain compatibility with previous versions of the standard, devices supporting COV data collection shall support switching between COV and polled modes in response to writes to Log_Interval. If the Logging_Type property has the value POLLED, changing the Log_Interval property from a non-zero value to the value zero shall change the value of Logging_Type to COV.

In 135-2008, another relevant section 12.30.13 Log_Interval contains: If Logging_Type has the value TRIGGERED, then the value of this property shall be zero and ignored. This property shall be writable if Logging_Type has the value POLLED, and shall be read-only if Logging_Type has the value TRIGGERED.

Before Protocol_Revision 7, the Logging_Type property did not even exist.

In 135-2004, the corresponding relevant language in section 12.25.9 Log_Interval contained: The value of this property must be non-zero if COV_Resubscription_Interval is not present. This property must be writable if present.

Another consideration to note: How should the tester put the IUT into Logging_Type COV mode, if COV_Resubscription_Interval is not present, and Protocol_Revision < 7?

Response:

Add to the Configuration Requirements: The Logging_Type shall not have a value of TRIGGERED.