

Clarification Request

References: ???

Background / Proposed Solution:

Configuration:

- 1) Client which is used to configure a 'setpoint' value
- 2) Server/Gateway which contains an AO and writes to a non-BACnet device
- 3) Non-BACnet device which contains the controllable hardware

Working situation:

The Client sets the 'setpoint' to 75 degrees. The Client then uses WP to the AO, Present_Value with some priority (presumably 8). The Server/Gateway accepts the WP and acknowledges to the Client. The Server/Gateway then write (proprietary) to the non-BACnet device's hardware point.

Complete power failure shuts down all 3 devices.

The client restores to normal conditions.

The non-BACnet device restores to last known settings

The server/gateway resets all values to 0 upon start up. Then the server/gateway writes 0 to the hardware point.

Currently the client must be forced to write the 'setpoint' to the server/gateway in order to restore correct operation.

It has also been observed if someone manually changes the non-BACnet device via controls on the device to adjust the hardware point. The server/gateway does not reflect the changes to the point in the Analog-Output, Present_Value.

Question:

Does BACnet stipulate behavior after a power outage for a client and/or a server device? Does the BTL have a position?

Response:

No. BACnet leaves the behavior up to the implementer. A question should be submitted to the BACnet committee to improve the requirements of the standard.

Values in objects that are not a reflection of runtime status should survive a power reset. For example, relinquish-default, object names, descriptions, etc. (TODO: put in Implementers Guide)

A reasonable imp, contains writable relinquish-default (when gateway if AO doesn't know what the output is) and be persistent. Applicability to the application (configurable). Most servers are completely persistent.

Devices should not make assumptions about persistence and should be flexible

Gateways should attempt to sync with device controlled. Maybe read actual value from controlled hardware.

Question:

Does BACnet require the Analog-Output, Present_Value of a gateway to reflect the value of the hardware point beneath it?

Response:

No but it should indicate the 'overridden' bit.

Value of hardware point beneath if capable of doing so.

Output but manual override is off board. You put to 75. Override not detectable.

Writing on startup is the real issue. Building would work if nothing was written on startup.