

Clarification Request

References: 135.1-2007

Date of BTL-WG Response: __01-Sep-2011__

Background / Proposed Solution:

I had never interpreted the use of '?' in clause 4.5.10 as implying which properties could be set to '?'. I can see how someone might interpret it that way. In reviewing this section, it is clear to me that if that was the actual intent, it falls short as there are many properties that should allow the use of '?' but do not. For example, the following properties should allow the use of '?' but do not indicate it: CAL.Present_Value, DEV.Local_Time, DEV.Local_Date, GRP.Present_Value, etc. I purposely selected properties that were present in the original version because these would not be affected by any later incorrect interpretation by anyone extending the section for object types added later. It should also be noted that no properties that have been added since the original version of 135.1 apply that same rule and thus it is probably not a commonly held interpretation.

I recall advocacy of restrictions on the use '?' being described to the BTL-WG as required because an EPICS could be provided that has all properties, or all properties of a particular datatype, set to '?'. The reason to disallow this would be that it allows a device to circumvent a number of tests. I do not recall a discussion that the standard itself states that these properties are not allowed to change value.

So it seems that there are a few questions that we should consider:

Questions:

- 1) Is there a need to ensure that a minimum set of properties are not using '?' in the EPICS?
- 2) If yes, is the best solution to restrict the use of '?' by disallowing its use on certain properties?
- 3) If yes, for which properties does the standard provide sufficient constraints indicating that the value will be static during testing? (Note that this decision would not be based on what testing would need but rather on what the standard itself states are requirements for a property).
- 4) If restricting the use of '?' is not desirable, what alternatives are available to ensure that the testing process is not compromised?

Response:

Except for the (object-identifier) and (object-name) in each object, and the (object-list) in the Device object, any property in the EPICS can specify a value of ?.