

Problem:

Simple devices always support ReadProperty and but not always ReadPropertyMultiple. Having a simple property to read - similar to the Device object Object_List - for each object that would return the enumeration of all of its properties, would be very useful for device discovery.

Additionally, if the device has a small APDU size, the array property can be returned a single property at a time, which is not possible for ReadPropertyMultiple ALL. Note that ReadPropertyMultiple ALL returns all the properties and their values, and this new property is only expected to return the property enumerations.

Revisions:

References:

Solution Summary:

Add a BACnetARRAY property to every object that defines the list of ALL properties, similar to what can be determined from a ReadPropertyMultiple ALL.

Changes to ASHRAE Standard 135-2004:

[Change all objects 12.X and Table 12-X Properties, p. 130-249]

12.X [x] Object Type

The object and its properties are summarized in Table 12-X and described in detail in this subclause.

Table 12-X. Properties of the [x] Object Type

Property Identifier	Property Datatype	Conformance Code
...
Object_Type	BACnetObjectType	R
Object_Property_List	BACnetARRAY[N]of BACnetPropertyIdentifier	R
...

12.X.X Object_Property_List

This read only property is a BACnetARRAY of Property Identifiers, one Property Identifier for each property within the object that is accessible through BACnet services.

Changes to ASHRAE Standard 135.1-2003:

[no changes]

[end]