****

**BACnet** **TESTING LABORATORIES**

**FUNCTIONALITY CHECKLIST**

**Revision 26.1 Final**

**Revised November 24, 2025**

# Introduction

The ***BTL Functionality Checklist*** identifies the testable options implemented by the IUT. The table is divided out into sections by functionality. In general, each section maps onto a BIBB, object type, or functional category. Each section has a Base Requirements option and if the BIBB, object type or functional category is supported by the IUT, this item must be selected. In addition, any other option in the section that has a Listing Code of R or BTL-R must be selected.

Each item supported by the IUT must be marked with a single 'X' in the corresponding 'Support' column.

If the IUT was previously BTL Certified, unchanged functionality must remain marked with a single 'X'. All added and changed functionality must be marked with 'XX' in the 'Support' column. For what qualifies as changed functionality, see BTL Testing Policies, Clause 6.2. For functionality that has been removed, delete the 'X' and highlight the row in light grey.

There are some items in the table that are already marked with an 'X' in the ‘Support’ column. These are items that all BACnet devices must implement.

The Listing column indicates whether the option is required or not. The codes in the table are:

R = Required. Items marked with this listing code are required for a listing if the IUT implements the associated BIBB, object type, or functional category.

BTL-R = Required by BTL. Items marked with this listing code are required for a listing if the IUT implements the associated BIBB, object type, or functional category.

C = Conditionally Required. Items marked with this listing code may be required for a listing if the IUT implements the associated BIBB, object type, or functional category. The conditions under which the item will be required are identified in a footnote in the Checklist table.

BTL-C = Conditionally Required by BTL. Items marked with this listing code may be required for a listing if the IUT implements the associated BIBB, object type, or functional category. The conditions under which the item will be required are identified in a footnote in the Checklist table.

S = Suggested. The BTL suggests that all IUTs implement this option if they implement the associated BIBB, object type, or functional category.

O = Optional. Items marked with this listing code are optional.

N = Not recommended. The BTL recommends against IUTs implementing this option due to possible interoperability or performance problems related with the option.

The ‘Option’ column names the functional item. For each item there is a corresponding item of the same name in the ***BTL Test Plan***. The corresponding item in the ***BTL Test Plan*** provides a more detailed description of the option.

Once filled out, this document will be used to identify the tests to apply to the IUT. By relating the selected items in this table to items in the ***BTL Test Plan***, the tester will have a list of all tests that must be applied to the IUT.

If the IUT supports GW-VN-B, then a separate BTL Checklist shall be filled out describing the functionality of the virtual devices. The virtual device checklist shall document all of the functionality that is supported in the virtual devices even if it cannot all be supported in a single virtual device.

NOTE: Only Clause 1.1 IUT Information and the 'Support' column may be updated. No rows or columns may be added or removed.

## IUT Information

This section shall provide additional information about the IUT when the BTL Checklist is filled out.

|  |  |
| --- | --- |
| Fill out date |  |
| Vendor Name |  |
| Product Name |  |
| Product Model Number |  |
| BACnet Protocol Version | 1 |
| BACnet Protocol Revision1 |  |
| BACnet Device Profile |  |
| BACnet Firmware Revision |  |
| BACnet Application Software Version |  |
|  |  |
| Remarks |  |

1 If the IUT claims a Protocol\_Revision higher than 26, contact the BTL for interim tests for the product.

# Basic BACnet Functionality

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Basic Functionality (applies to all BACnet devices)** | | |
| X | R | Base Requirements |
| X | R | EPICS Consistency Tests |
| X | R | Supports DS-RP-B |
|  | C1 | Uses Who-Is and I-Am services for router address discovery |
|  | C1 | Uses Who-Is-Router-to-Network (any network) for router address discovery |
|  | C1 | Uses Who-Is-Router-to-Network (specific network) for router address discovery |
|  | C1 | Uses MAC broadcasts for router discovery |
|  | C1,2 | Uses static router address configuration |
|  | C3 | Supports DM-DDB-B |
|  | C3 | Supports DM-DOB-B |
|  | C | Initiates Confirmed Requests |
| 1 At least one of these options must be supported if the device is capable of initiating any unicast service requests besides COV notifications.  2 Other forms of router address discovery must also be supported.  3 Required unless the device is an MS/TP subordinate device. | | |
| **Segmentation Support** | | |
|  | R | Base Requirements |
|  | O | Issues Segmented Responses |
|  | O | Accepts Segmented Responses without Specifying the Maximum |
|  | | |
| **Private Transfer Services** | | |
|  | R | Base Requirements |
|  | O | Initiates ConfirmedPrivateTransfer |
|  | O | Initiates UnconfirmedPrivateTransfer |
|  | O | Executes ConfirmedPrivateTransfer |
|  | O | Executes UnconfirmedPrivateTransfer |

# Objects

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Analog Input Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Analog Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Analog Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Averaging Object** | | |
|  | R | Base Requirements |
|  | | |
| **Binary Input Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Polarity property |
|  | O | Supports change of state tracking |
|  | O | Supports elapsed active time tracking |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Binary Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Polarity property |
|  | O | Supports change of state tracking |
|  | O | Supports elapsed active time tracking |
|  | O | Supports Minimum\_Off\_Time |
|  | O | Supports Minimum\_On\_Time |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Binary Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports change of state tracking |
|  | O | Supports elapsed active time tracking |
|  | O | Supports command prioritization |
|  | O | Supports Minimum\_Off\_Time |
|  | O | Supports Minimum\_On\_Time |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Calendar Object** | | |
|  | R | Base Requirements |
|  | | |
| **Command Object** | | |
|  | R | Base Requirements |
|  | S | Supports Action\_Text |
|  | O | Supports Post\_Delay |
|  | O | Supports external writes |
|  | O | Supports resizable Action and Action\_Text properties |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Device Object** | | |
| X | R | Base Requirements |
|  | R | Supports configurable device name and instance |
|  | R | Supports Database\_Revision property |
|  | C1 | Supports Time\_Synchronization\_Recipients |
|  | C1 | Supports UTC\_Time\_Synchronization\_Recipients |
|  | O | Contains a writable Local\_Date property |
|  | O | Contains a writable Local\_Time property |
|  | O | Supports UTC\_Offset property |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 If either Time\_Synchronization\_Recipients or UTC\_Time\_Synchronization\_Recipients properties are supported then both shall be supported.  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Event Enrollment Object** | | |
|  | R | Base Requirements |
|  | R | Supports AE-N-I-B |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Group Object** | | |
|  | R | Base Requirements |
|  | | |
| **Loop Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Contains a non-empty Setpoint\_Reference list |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Multi-state Input Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | S | Supports State\_Text |
|  | O | Supports resizable State\_Text property |
|  | O | Supports writable Number\_Of\_States property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Multi-state Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports configurable Out\_Of\_Service property |
|  | S | Supports State\_Text |
|  | O | Supports resizable State\_Text property |
|  | O | Supports writable Number\_Of\_States property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Multi-state Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | S | Supports State\_Text |
|  | O | Supports command prioritization |
|  | O | Supports resizable State\_Text property |
|  | O | Supports writable Number\_Of\_States property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Notification Class Object** | | |
|  | R | Base Requirements |
|  | C1 | Supports DM-DDB-A |
|  | C2,3 | Supports writable Recipient\_List property |
|  | C2 | Supports read-only Recipient\_List property |
|  | BTL-C3 | Supports AE-CRL-B |
|  | O4 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Required if 'Supports writable Recpient\_List property' selected.  2 At least one of these options must be supported.  3 Required if the IUT claims device profile B-AAC or B-BC.  4 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Proprietary Objects** | | |
|  | R | Base Requirements |
|  | | |
| **Schedule Object** | | |
|  | R | Base Requirements |
|  | BTL-C1 | Supports SCHED-I-B |
|  | BTL-C1 | Supports SCHED-WS-I-B |
|  | BTL-C1 | Supports SCHED-R-B |
|  | O | Supports resizable Exception\_Schedule property |
|  | C2 | Supports Write\_Every\_Scheduled\_Action property |
|  | O3 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 You must support one of the listed scheduling BIBBs if your device contains a schedule object  2 Protocol\_Revision 24 or higher must be claimed.  3 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Trend Log Object** | | |
|  | R | Base Requirements |
|  | BTL-R | Supports T-VMT-I-B |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Structured View Object** | | |
|  | R | Base Requirements |
|  | O | Supports writable and resizable Subordinate\_List and contains a Subordinate\_Annotations property |
|  | | |
| **Event Log Object** | | |
|  | R | Base Requirements |
|  | C1 | Supports AE-EL-I-B |
|  | C1 | Supports AE-EL-E-B |
|  | O | Supports BUFFER\_READY notification |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 At least one of these options is required if the IUT supports theEvent Log object type.  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Trend Log Multiple Object** | | |
|  | R | Base Requirements |
|  | R | Supports T-VMMV-I-B |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Bitstring Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **CharacterString Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Date Pattern Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property or can be placed Out\_Of\_Service |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Date Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property or can be placed Out\_Of\_Service |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **DateTime Pattern Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property or can be placed Out\_Of\_Service |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **DateTime Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property or can be placed Out\_Of\_Service |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Integer Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Large Analog Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **OctetString Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Positive Integer Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Time Pattern Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property or can be placed Out\_Of\_Service |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Time Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Global Group Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Group\_Members properties |
|  | BTL-C1 | Supports DS-RP-A for retrieving member values |
|  | O2 | Is able to read REAL values |
|  | O2,3 | Is able to read Unsigned values |
|  | O2,3 | Is able to read INTEGER (Signed) values |
|  | O2 | Is able to read BOOLEAN values |
|  | O2 | Is able to read Bit String values |
|  | O2,4 | Is able to read Enumerated values |
|  | O2 | Is able to read NULL values |
|  | O | Is able to read Double values |
|  | O | Is able to read Character String values |
|  | O | Is able to read Octet String values |
|  | O | Is able to read Date values |
|  | O | Is able to read Time values |
|  | O | Is able to read BACnetObjectIdentifier values |
|  | O | Supports COV to retrieve remote property values |
|  | O5,6 | Supports COVU\_Period and COVU\_Recipients properties |
|  | O | Supports Event Reporting |
|  | O7 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 If the Group\_Members property is writable, DS-RP-A shall be supported.  2 If the Group\_Members property is writable, this data type must be supported.  3 Reading of 32 bit Unsigned and INTEGER values is minimally required.  4 Reading of 16-bit Enumerated values is minimally required.  5 If COVU\_Period or COVU\_Recipients properties are present then both shall be present and writable.  6 If COVU\_Period or COVU\_Recipients properties are present then DM-DDB-A and DS-COVU-B shall be supported.  7 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Accumulator Object** | | |
|  | R | Base Requirements |
|  | O | Supports Prescale property |
|  | O | Supports Logging\_Record property |
|  | O | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Value\_Set property |
|  | O | Supports writable Value\_Before\_Change property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Program Object** | | |
|  | R | Base Requirements |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Life Safety Point Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Member\_Of property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Life Safety Zone Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Member\_Of property |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Pulse Converter Object** | | |
|  | R | Base Requirements |
|  | O | Supports configurable Out\_Of\_Service property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Access Door Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports configurable Out\_Of\_Service property |
|  | C1 | Supports Door\_Status property |
|  | O | Supports Lock\_Status property |
|  | O | Supports Secured\_Status property |
|  | O | Supports Door\_Unlock\_Delay\_Time property |
|  | O | Supports Masked\_Alarm\_Values property |
|  | O | Supports intrinsic reporting |
|  | O | Supports the value source mechanism. |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 If Secured\_Status is supported, this is required.  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Load Control Object** | | |
|  | R | Base Requirements |
|  | R | Supports writable Requested\_Shed\_Level to LEVEL choice |
|  | O | Supports writable Reliability property |
|  | O | Supports writable Requested\_Shed\_Level to PERCENT choice |
|  | O | Supports writable Requested\_Shed\_Level to AMOUNT choice |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Access Point Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports writable Active\_Authentication\_Policy property |
|  | O | Supports writable Lockout property |
|  | O | Supports writable Threat\_Level property |
|  | O | Supports Occupancy\_Upper\_Limit\_Enforced and Occupancy\_Count\_Adjust properties |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Access Zone Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports Occupancy\_Count property |
|  | O | Supports Credentials\_In\_Zone property |
|  | O | Supports Passback\_Mode property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Access User Object** | | |
|  | R | Base Requirements |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Access Rights Object** | | |
|  | R | Base Requirements |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Access Credential Object** | | |
|  | R | Base Requirements |
|  | O | Supports Days\_Remaining property |
|  | O | Supports Absentee\_Limit property |
|  | O | Supports Last\_Access\_Point, Last\_Use\_Time and Last\_Access\_Event properties |
|  | O | Supports Writable Extended\_Time\_Enable property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Credential Data Input Object** | | |
|  | R | Base Requirements |
|  | O | Supports configurable Out\_Of\_Service property |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Network Security Object** | | |
|  | R1 | Base Requirements |
| 1Contact BTL for interim tests for this object. | | |
| **Notification Forwarder Object** | | |
|  | R | Base Requirements |
|  | R | Supports DM-LM-B |
|  | BTL-C1 | Supports AE-NF-B |
|  | BTL-C1 | Supports AE-NF-I-B |
|  | C2 | Supports Port\_Filter Property |
|  | O | Supports configurable Out\_Of\_Service property |
|  | O3 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| **1** At least one of these options is required if the IUT contains a Notification Forwarder object.  **2** A Port\_Filter property is required if the IUT is a router.  3 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Alert Enrollment Object** | | |
|  | R | Base requirements |
|  | R | Supports AE-N-I-B |
|  | | |
| **Channel Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports Allow\_Group\_Delay\_Inhibit |
|  | R | Is able to correctly handle targets of BOOLEAN data type |
|  | R | Is able to correctly handle targets of Unsigned data type |
|  | R | Is able to correctly handle targets of INTEGER data type |
|  | R | Is able to correctly handle targets of REAL data type |
|  | R | Is able to correctly handle targets of Double data type |
|  | R | Is able to correctly handle targets of ENUMERATED data type |
|  | R | Is able to correctly handle targets of NULL data type |
|  | R | Is able to correctly handle targets of OCTET STRING data type |
|  | R | Is able to correctly handle targets of CharacterString data type |
|  | R | Is able to correctly handle targets of BIT STRING data type |
|  | R | Is able to correctly handle targets of Date data type |
|  | R | Is able to correctly handle targets of Time data type |
|  | R | Is able to correctly handle targets of BACnetObjectIdentifier data type |
|  | R | Is able to correctly handle targets of BACnetLightingCommand data type |
|  | R | Supports DS-WG-I-B |
|  | O | Supports DS-WG-E-B |
|  | O | Supports the value source mechanism. |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Lighting Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | R | Supports all BACnetLightingOperations |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports blink-warn |
|  | O | Supports Transition property |
|  | O | Supports Feedback\_Value property |
|  | O | Supports Min\_Actual\_Value and Max\_Actual\_Value properties |
|  | O | Supports the value source mechanism. |
|  | O1,3 | Supports Color\_Reference property |
|  | O1 | Supports color override |
|  | O1 | Supports High\_End\_Trim or Low\_End\_Trim properties |
|  | O2 | Supports intrinsic reporting |
|  | O4 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 24 or higher must be claimed  2 Protocol\_Revision 21 or higher must be claimed  3 Must be claimed if the IUT supports color override  4 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Binary Lighting Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports blink-warn |
|  | O | Supports writable Polarity property |
|  | O | Supports strike count tracking |
|  | O | Supports elapsed active time tracking |
|  | O | Supports the value source mechanism. |
|  | O1,2 | Supports Color\_Reference property |
|  | O1 | Supports color override |
|  | O3 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 24 or higher must be claimed  2 Must be claimed if the IUT supports color override  3 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Network Port Object** | | |
|  | R1 | Base Requirements |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Support for Network Port objects is required for devices claiming Protocol\_Revision 17 or higher.  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Timer Object** | | |
|  | R | Base Requirements |
|  | O | Supports configurable Out\_Of\_Service property |
|  | O | Supports Writable Present\_Value while Out\_Of\_Service is FALSE |
|  | O1 | Supports Update\_Time |
|  | O | Supports Expiration\_Time |
|  | O | Supports Default\_Timeout |
|  | O | Supports Priority\_For\_Writing |
|  | O | Supports writable Priority\_For\_Writing and List\_Of\_Object\_Property\_References |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Required if the IUT supports intrinsic reporting for Timer object type.  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Elevator Group Object** | | |
|  | R1 | Base Requirements |
|  | O | Supports Landing\_Call\_Control property |
| 1 Protocol\_Revision 18 or higher must be claimed | | |
| **Lift Object** | | |
|  | R1 | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports Energy\_Meter\_Ref and Energy\_Meter properties |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 18 or higher must be claimed  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Escalator Object** | | |
|  | R1 | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports Energy\_Meter\_Ref and Energy\_Meter properties |
|  | O2 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 18 or higher must be claimed  2 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **File Object** | | |
|  | R | Base Requirements |
|  | C1 | Supports DM-BR-B |
|  | C1,2 | Supports BACnet/SC Certificate Exchange |
|  | C1 | Supports a record-based File object for a purpose other than Backup and Restore or BACnet/SC Certificate Exchange |
|  | C1 | Supports a stream-based File object for a purpose other than Backup and Restore or BACnet/SC Certificate Exchange |
|  | O | Contains a writable stream-based File for a purpose other than Backup and Restore or BACnet/SC Certificate Exchange |
| 1 At least one of these options is required if the IUT supports the File object type.  2 Protocol\_Revision 24 or higher must be claimed. | | |
| **Staging Object** | | |
|  | R | Base Requirements |
|  | S | Supports configurable Out\_Of\_Service property |
|  | O | Supports configurable Stages property |
|  | O | Supports Stage\_Names property |
|  | O | Supports writable Target\_References property |
|  | O | Supports the value source mechanism |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Audit Reporter Object** | | |
|  | R | Base Requirements |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Audit Log Object** | | |
|  | R | Base Requirements |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
|  | O | Supports intrinsic reporting |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Color Object** | | |
|  | R | Base Requirements |
|  | O | Supports Transition property |
|  | O | Supports a configurable Default\_Fade\_Time |
|  | O | Supports the value source mechanism |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |
| **Color Temperature Object** | | |
|  | R | Base Requirements |
|  | O | Supports Transition property |
|  | O | Supports the value source mechanism |
|  | O1 | Supports configurable Reliability\_Evaluation\_Inhibit property |
| 1 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property. | | |

# Data Sharing BIBBs

| **Support** | | **Listing** | | **Option** |
| --- | --- | --- | --- | --- |
| **Data Sharing - ReadProperty - A** | | | | |
|  | | R | | Base Requirements |
|  | | C1 | | Can read non-array properties |
|  | | C1 | | Can read array elements |
|  | | C1 | | Can read the size of an array |
|  | | C1 | | Can read whole arrays |
|  | | O | | Can read list properties |
|  | | C2 | | Can read NULL property values |
|  | | C2 | | Can read BOOLEAN property values |
|  | | C2 | | Can read Enumerated property values |
|  | | C2 | | Can read INTEGER property values |
|  | | C2 | | Can read Unsigned property values |
|  | | C2 | | Can read REAL property values |
|  | | C2 | | Can read Double property values |
|  | | C2 | | Can read Time property values |
|  | | C2 | | Can read Date property values |
|  | | C2 | | Can read Character String property values |
|  | | C2 | | Can read Octet String property values |
|  | | C2 | | Can read Bit String property values |
|  | | C2 | | Can read BACnetObjectIdentifier property values |
|  | | C2 | | Can read constructed property values |
|  | | C2 | | Can read proprietary property values of basic data types |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - ReadProperty - B** | | | | |
| X | | R | | Base Requirements |
| X | | R | | Contains Enumerated property values |
| X | | R | | Contains Unsigned property values |
| X | | R | | Contains BACnetObjectIdentifier property values |
| X | | R | | Contains Character String property values |
| X | | R | | Contains Bit String property values |
|  | | O | | Contains NULL property values |
|  | | O | | Contains BOOLEAN property values |
|  | | O | | Contains INTEGER property values |
|  | | O | | Contains REAL property values |
|  | | O | | Contains Double property values |
|  | | O | | Contains Time property values |
|  | | O | | Contains Date property values |
|  | | O | | Contains Octet String property values |
|  | | O | | Contains proprietary properties with basic data types |
|  | | | | |
| **Data Sharing - ReadPropertyMultiple - A** | | | | |
|  | | R | | Base Requirements |
|  | | BTL-R | | Supports DS-RP-A |
|  | | C1 | | Can read multiple properties from a single object |
|  | | C1 | | Can read a single property from multiple objects |
|  | | C1 | | Can read multiple properties from multiple objects |
|  | | C1 | | Can read using the special ALL property identifier |
|  | | C1 | | Can read using the special OPTIONAL property identifier |
|  | | C1 | | Can read using the special REQUIRED property identifier |
|  | | BTL-C2 | | Can fallback to ReadProperty based on Protocol\_Services\_Supported |
|  | | BTL-C2 | | Can fallback to ReadProperty upon receipt of UNRECOGNIZED\_SERVICE |
|  | | O | | Can read a single property from a single object |
|  | | O | | Can read non-array properties |
|  | | O | | Can read array elements |
|  | | O | | Can read the size of an array |
|  | | O | | Can read whole arrays |
|  | | O | | Can read list properties |
|  | | C3 | | Can read NULL property values |
|  | | C3 | | Can read BOOLEAN property values |
|  | | C3 | | Can read Enumerated property values |
|  | | C3 | | Can read INTEGER property values |
|  | | C3 | | Can read Unsigned property values |
|  | | C3 | | Can read REAL property values |
|  | | C3 | | Can read Double property values |
|  | | C3 | | Can read Time property values |
|  | | C3 | | Can read Date property values |
|  | | C3 | | Can read Character String property values |
|  | | C3 | | Can read Octet String property values |
|  | | C3 | | Can read Bit String property values |
|  | | C3 | | Can read BACnetObjectIdentifier property values |
|  | | C3 | | Can read constructed property values |
|  | | C3 | | Can read proprietary property values of basic data types |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - ReadPropertyMultiple - B** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Contains Enumerated property values |
|  | | R | | Contains Unsigned property values |
|  | | R | | Contains BACnetObjectIdentifier property values |
|  | | R | | Contains Character String property values |
|  | | R | | Contains Bit String property values |
|  | | O | | Contains NULL property values |
|  | | O | | Contains BOOLEAN property values |
|  | | O | | Contains INTEGER property values |
|  | | O | | Contains REAL property values |
|  | | O | | Contains Double property values |
|  | | O | | Contains Time property values |
|  | | O | | Contains Date property values |
|  | | O | | Contains Octet String property values |
|  | | O | | Contains proprietary properties with basic data types |
|  | | | | |
| **Data Sharing - WriteProperty - A** | | | | |
|  | | R | | Base Requirements |
|  | | C1 | | Can write non-array properties |
|  | | C1 | | Can write array elements |
|  | | C1 | | Can write whole arrays |
|  | | BTL-C2 | | Can write whole lists |
|  | | BTL-C3 | | Can command and relinquish with a priority |
|  | | O | | Can write NULL property values to non-commandable properties |
|  | | O | | Can write the size of an array |
|  | | O | | Can write BOOLEAN property values |
|  | | O | | Can write Enumerated property values |
|  | | O | | Can write INTEGER property values |
|  | | O | | Can write Unsigned property values |
|  | | O | | Can write REAL property values |
|  | | O | | Can write Double property values |
|  | | O | | Can write Time property values |
|  | | O | | Can write Date property values |
|  | | O | | Can write Character String property values |
|  | | O | | Can write Octet String property values |
|  | | O | | Can write Bit String property values |
|  | | O | | Can write BACnetObjectIdentifier property values |
|  | | O | | Can write constructed property values |
|  | | O | | Can write proprietary property values of basic data types |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 This option shall be supported if the device is able to initiate AddListElement or RemoveListElement.  3 This is required if the device can be configured to write to a property that may be commandable (e.g., analog-value, present-value). | | | | |
| **Data Sharing - WriteProperty - B** | | | | |
|  | | R | | Base Requirements |
|  | | C1 | | Contains writable non-array properties |
|  | | C1 | | Contains writable array properties |
|  | | O | | Contains resizable array properties |
|  | | C3 | | Contains writable list properties |
|  | | O | | Contains commandable properties |
|  | | O | | Contains non-commandable properties which accept a written NULL value |
|  | | C2 | | Contains writable BOOLEAN properties |
|  | | C2 | | Contains writable Enumerated properties |
|  | | C2 | | Contains writable INTEGER properties |
|  | | C2 | | Contains writable Unsigned properties |
|  | | C2 | | Contains writable REAL properties |
|  | | C2 | | Contains writable Double properties |
|  | | C2 | | Contains writable Time properties |
|  | | C2 | | Contains writable Date properties |
|  | | C2 | | Contains writable Character String properties |
|  | | C2 | | Contains writable Octet String properties |
|  | | C2 | | Contains writable Bit String properties |
|  | | C2 | | Contains writable BACnetObjectIdentifier properties |
|  | | C2 | | Contains writable properties with non-basic data types |
|  | | C2 | | Contains writable proprietary properties with basic data types |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 Required if the device contains properties modifiable via AddListElement/RemoveListElement. | | | | |
| **Data Sharing - WritePropertyMultiple - A** | | | | |
|  | | R | | Base Requirements |
|  | | BTL-R | | Supports DS-WP-A |
|  | | C1 | | Can write multiple properties to a single object |
|  | | C1 | | Can write a single property to multiple objects |
|  | | C1 | | Can write multiple properties to multiple objects |
|  | | O | | Can write a single property to a single object |
|  | | O | | Can write non-array properties |
|  | | O | | Can write array elements |
|  | | O | | Can write the size of an array |
|  | | O | | Can write whole arrays |
|  | | O | | Can write whole lists |
|  | | O | | Can command and relinquish with a priority |
|  | | O | | Can write NULL property values to non-commandable properties |
|  | | O | | Can write BOOLEAN property values |
|  | | O | | Can write Enumerated property values |
|  | | O | | Can write INTEGER property values |
|  | | O | | Can write Unsigned property values |
|  | | O | | Can write REAL property values |
|  | | O | | Can write Double property values |
|  | | O | | Can write Time property values |
|  | | O | | Can write Date property values |
|  | | O | | Can write Character String property values |
|  | | O | | Can write Octet String property values |
|  | | O | | Can write Bit String property values |
|  | | O | | Can write BACnetObjectIdentifier property values |
|  | | O | | Can write constructed property values |
|  | | O | | Can write proprietary property values of basic data types |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - WritePropertyMultiple - B** | | | | |
|  | | R | | Base Requirements |
|  | | C1 | | Contains multiple objects with writable properties |
|  | | C1 | | Contains objects with multiple writable properties |
|  | | O | | Contains multiple objects with multiple writable properties |
|  | | O | | Contains writable non-array properties |
|  | | O | | Contains writable array properties |
|  | | O | | Contains resizable array properties |
|  | | C2 | | Contains writable list properties |
|  | | O | | Contains commandable properties |
|  | | O | | Contains non-commandable properties which accept a written NULL value |
|  | | C3 | | Contains writable BOOLEAN properties |
|  | | C3 | | Contains writable Enumerated properties |
|  | | C3 | | Contains writable INTEGER properties |
|  | | C3 | | Contains writable Unsigned properties |
|  | | C3 | | Contains writable REAL properties |
|  | | C3 | | Contains writable Double properties |
|  | | C3 | | Contains writable Time properties |
|  | | C3 | | Contains writable Date properties |
|  | | C3 | | Contains writable Character String properties |
|  | | C3 | | Contains writable Octet String properties |
|  | | C3 | | Contains writable Bit String properties |
|  | | C3 | | Contains writable BACnetObjectIdentifier properties |
|  | | C3 | | Contains writable properties with non-basic data types |
|  | | C3 | | Contains writable proprietary properties with basic data types |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 Required if the device contains properties modifiable via AddListElement/RemoveListElement.  3 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Change Of Value - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Subscribes with lifetimes up to 8 hours in duration |
|  | | C1 | | Can subscribe for confirmed notifications |
|  | | C1 | | Can subscribe for unconfirmed notifications |
|  | | C2 | | Can subscribe for COV from Analog objects |
|  | | C2 | | Can subscribe for COV from Binary objects |
|  | | C2 | | Can subscribe for COV from Life Safety objects |
|  | | C2 | | Can subscribe for COV from Loop objects |
|  | | C2 | | Can subscribe for COV from Multi-state objects |
|  | | C2 | | Can subscribe for COV from CharacterString objects |
|  | | C2 | | Can subscribe for COV from Date objects |
|  | | C2 | | Can subscribe for COV from DateTime objects |
|  | | C2 | | Can subscribe for COV from Integer objects |
|  | | C2 | | Can subscribe for COV from Large Analog objects |
|  | | C2 | | Can subscribe for COV from OctetString objects |
|  | | C2 | | Can subscribe for COV from Positive Integer objects |
|  | | C2 | | Can subscribe for COV from Time objects |
|  | | C2 | | Can subscribe for COV from Pulse Converter objects |
|  | | C2 | | Can subscribe for COV from Access Door objects |
|  | | C2 | | Can subscribe for COV from Load Control objects |
|  | | C2 | | Can subscribe for COV from Access Point objects |
|  | | C2 | | Can subscribe for COV from Credential Data Input objects |
|  | | C2 | | Can subscribe for COV from Lighting Output objects |
|  | | C2 | | Can subscribe for COV from Binary Lighting Output objects |
|  | | C2 | | Can subscribe for COV from Staging objects |
|  | | C2 | | Can subscribe for COV from other standard object types |
|  | | BTL-C3 | | Can cancel subscriptions |
|  | | O | | Can subscribe for COV from proprietary objects |
|  | | N | | Can request infinite subscriptions |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 Support for this option is suggested except in the case where the device is able to generate infinite subscriptions in which case it is required. | | | | |
| **Data Sharing - Change Of Value - B** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports Lifetimes up to 8 hours in duration |
|  | | R | | Supports 5 concurrent COV subscribers |
|  | | C1 | | Supports COV for Analog Input objects |
|  | | C1 | | Supports COV for Analog Output objects |
|  | | C1 | | Supports COV for Analog Value objects |
|  | | C1 | | Supports COV for Binary Input objects |
|  | | C1 | | Supports COV for Binary Output objects |
|  | | C1 | | Supports COV for Binary Value objects |
|  | | C1 | | Supports COV for Life Safety Point objects |
|  | | C1 | | Supports COV for Life Safety Zone objects |
|  | | C1 | | Supports COV for Loop objects |
|  | | C1 | | Supports COV for Multi-state Input objects |
|  | | C1 | | Supports COV for Multi-state Output objects |
|  | | C1 | | Supports COV for Multi-state Value objects |
|  | | C1 | | Supports COV for CharacterString Value objects |
|  | | C1 | | Supports COV for Date Value objects |
|  | | C1 | | Supports COV for Date Pattern Value objects |
|  | | C1 | | Supports COV for DateTime Value objects |
|  | | C1 | | Supports COV for DateTime Pattern Value objects |
|  | | C1 | | Supports COV for Integer Value objects |
|  | | C1 | | Supports COV for Large Analog Value objects |
|  | | C1 | | Supports COV for Positive Integer Value objects |
|  | | C1 | | Supports COV for Time Value objects |
|  | | C1 | | Supports COV for Time Pattern Value objects |
|  | | C1 | | Supports COV for OctetString Value objects |
|  | | C1 | | Supports COV for Pulse Converter objects |
|  | | C1 | | Supports COV for Access Door objects |
|  | | C1 | | Supports COV for Load Control objects |
|  | | C1 | | Supports COV for Access Point objects |
|  | | C1 | | Supports COV for Credential Data Input objects |
|  | | C1 | | Supports COV for Lighting Output objects |
|  | | C1 | | Supports COV for Binary Lighting Output objects |
|  | | C1 | | Supports COV for Staging objects |
|  | | C1 | | Supports COV for other standard object types |
|  | | O | | Supports COV for proprietary objects |
|  | | S | | Will accept infinite COV subscriptions |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Advanced View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Advanced Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Initiates ReadRange** | | | | |
|  | | R | | Base Requirements |
|  | | | | |
| **Executes ReadRange** | | | | |
|  | | R | | Base Requirements |
|  | | | | |
| **Data Sharing - Change Of Value Unsubscribed - A** | | | | |
|  | | R | | Base Requirements |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing NULL values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing BOOLEAN values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Enumerated values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Integer values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Unsigned values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing REAL values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Double values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Time values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Date values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing DateTime values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Octet String values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Bit String values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Character String values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing BACnetObjectIdentifier values |
|  | | C1 | | Accepts UnconfirmedCOVNotifications containing Constructed values |
| **1** At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Change Of Value Unsubscribed - B** | | | | |
|  | | R | | Base Requirements |
|  | | | | |
| **Data Sharing - Change Of Value Property - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Subscribes with lifetimes up to 8 hours in duration |
|  | | C1 | | Can subscribe for confirmed notifications |
|  | | C1 | | Can subscribe for unconfirmed notifications |
|  | | C2 | | Can subscribe to non-array properties |
|  | | C2 | | Can subscribe to array elements |
|  | | C2 | | Can subscribe to the size of an array |
|  | | C2 | | Can subscribe to whole arrays |
|  | | O | | Can subscribe to list properties |
|  | | O | | Can subscribe with a COV Increment |
|  | | C3 | | Can subscribe to NULL property values |
|  | | C3 | | Can subscribe to BOOLEAN property values |
|  | | C3 | | Can subscribe to Enumerated property values |
|  | | C3 | | Can subscribe to INTEGER property values |
|  | | C3 | | Can subscribe to Unsigned property values |
|  | | C3 | | Can subscribe to REAL property values |
|  | | C3 | | Can subscribe to Double property values |
|  | | C3 | | Can subscribe to Time property values |
|  | | C3 | | Can subscribe to Date property values |
|  | | C3 | | Can subscribe to CharacterString property values |
|  | | C3 | | Can subscribe to OctetString property values |
|  | | C3 | | Can subscribe to BitString property values |
|  | | C3 | | Can subscribe to BACnetObjectIdentifier property values |
|  | | C3 | | Can subscribe to constructed property values |
|  | | C3 | | Can subscribe to proprietary property values of basic data types |
|  | | C3 | | Can subscribe to DateTime property values |
|  | | O | | Can cancel subscriptions |
|  | | C3 | | Can subscribe to Value\_Source properties |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Change Of Value Property - B** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports Lifetimes up to 8 hours in duration |
|  | | C1 | | Supports COVP for Status\_Flags changes |
|  | | C2 | | Supports COVP for non-array properties |
|  | | C2 | | Supports COVP for array elements |
|  | | C2 | | Supports COVP for the size of an array |
|  | | C2 | | Supports COVP for whole arrays |
|  | | O | | Supports COVP for a list property |
|  | | C3 | | Supports COVP for NULL property values |
|  | | C3 | | Supports COVP for BOOLEAN property values |
|  | | C3 | | Supports COVP for Enumerated property values |
|  | | C3 | | Supports COVP for INTEGER property values |
|  | | C3 | | Supports COVP for Unsigned property values |
|  | | C3 | | Supports COVP for REAL property values |
|  | | C3 | | Supports COVP for Double property values |
|  | | C3 | | Supports COVP for Time property values |
|  | | C3 | | Supports COVP for Date property values |
|  | | C3 | | Supports COVP for CharacterString property values |
|  | | C3 | | Supports COVP for OctetString property values |
|  | | C3 | | Supports COVP for BitString property values |
|  | | C3 | | Supports COVP for BACnetObjectIdentifier property values |
|  | | C3 | | Supports COVP for constructed property values |
|  | | C3 | | Supports COVP for Value\_Source properties |
|  | | C3 | | Supports COVP for DateTime properties |
| 1 Required if the Status\_Flags property ever changes value in an object which supports COV property subscriptions.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - WriteGroup - A** | | | | |
|  | | R | | Base Requirements |
|  | | | | |
| **Data Sharing - WriteGroup - Internal - B** | | | | |
|  | R | | | Base Requirements |
|  | R | | | Supports the Channel object that can propagate values to local objects |
|  | O | | | Supports the Channel object with a writable Allow\_Group\_Delay\_Inhibit property |
|  | | | | |
| **Data Sharing - WriteGroup - External - B** | | | | |
|  | R | | | Base Requirements |
|  | R | | | Supports DS-WG-I-B |
|  | R | | | Supports DS-WP-A |
|  | R | | | Supports the Channel Object that can propagate values to objects on remote devices |
|  | | | | |
| **Data Sharing - Value Source Information - B** | | | | |
|  | | R1 | | Base Requirements |
| 1 Protocol\_Revision 17 or higher must be claimed. | | | | |
| **Data Sharing - Change Of Value Multiple - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Subscribes with lifetimes up to 8 hours in duration |
|  | | O | | Can cancel subscriptions |
|  | | C1 | | Can subscribe for confirmed notifications |
|  | | C1 | | Can subscribe for unconfirmed notifications |
|  | | O | | Supports subscribing to timestamped notifications |
|  | | C2 | | Can subscribe to non-array properties |
|  | | C2 | | Can subscribe to array elements |
|  | | C2 | | Can subscribe to the size of an array |
|  | | C2 | | Can subscribe to whole arrays |
|  | | O | | Can subscribe to list properties |
|  | | O | | Can subscribe with a COV Increment |
|  | | C3 | | Can subscribe to NULL property values |
|  | | C3 | | Can subscribe to BOOLEAN property values |
|  | | C3 | | Can subscribe to Enumerated property values |
|  | | C3 | | Can subscribe to INTEGER property values |
|  | | C3 | | Can subscribe to Unsigned property values |
|  | | C3 | | Can subscribe to REAL property values |
|  | | C3 | | Can subscribe to Double property values |
|  | | C3 | | Can subscribe to Time property values |
|  | | C3 | | Can subscribe to Date property values |
|  | | C3 | | Can subscribe to CharacterString property values |
|  | | C3 | | Can subscribe to OctetString property values |
|  | | C3 | | Can subscribe to BitString property values |
|  | | C3 | | Can subscribe to BACnetObjectIdentifier property values |
|  | | C3 | | Can subscribe to Value\_Source property values |
|  | | C3 | | Can subscribe to constructed property values |
|  | | C3 | | Can subscribe to proprietary property values of basic data types |
|  | | C3 | | Can subscribe to DateTime property values |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Change Of Value Multiple - B** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports Lifetimes up to 8 hours in duration |
|  | | R | | Supports a minimum of 5 COV-multiple contexts with 5 COV-references per context |
|  | | C1 | | Supports COVM for non-array property |
|  | | C1 | | Supports COVM for array element |
|  | | C1 | | Supports COVM for the size of an array |
|  | | C1 | | Supports COVM for the whole array |
|  | | O | | Supports COVM for list property |
|  | | C2 | | Supports COVM for NULL property values |
|  | | C2 | | Supports COVM for BOOLEAN property values |
|  | | C2 | | Supports COVM for Enumerated property values |
|  | | C2 | | Supports COVM for INTEGER property values |
|  | | C2 | | Supports COVM for Unsigned property values |
|  | | C2 | | Supports COVM for REAL property values |
|  | | C2 | | Supports COVM for Double property values |
|  | | C2 | | Supports COVM for Time property values |
|  | | C2 | | Supports COVM for Date property values |
|  | | C2 | | Supports COVM for CharacterString property values |
|  | | C2 | | Supports COVM for OctetString property values |
|  | | C2 | | Supports COVM for BitString property values |
|  | | C2 | | Supports COVM for BACnetObjectIdentifier property values |
|  | | C2 | | Supports COVM for Value\_Source property values |
|  | | C2 | | Supports COVM for constructed property values |
|  | | C2 | | Supports COVM for DateTime property values |
| 1­ At least one of these options is required in order to claim conformance to this BIBB.  2­ At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Life Safety View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Life Safety Advanced View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Life Safety Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Life Safety Advanced Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Access Control View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Access Control Advanced View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Access Control Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Access Control Advanced Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Access Control User Configuration - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | R | | Supports DS-WP-A |
|  | | R1 | | Supports DM-OCD-A |
| 1 Object creation and deletion of Access Rights, Access User, and Access Credential objects is required. | | | | |
| **Data Sharing - Access Control User Configuration - B** | | | | |
|  | R | | | Base Requirements |
|  | R | | | Supports DS-WP-B |
|  | BTL-C1 | | | Supports Access User objects with writable configuration properties |
|  | BTL-C1 | | | Supports Access Rights objects with writable configuration properties |
|  | BTL-C1 | | | Supports Access Credential objects with writable configuration properties |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Access Control Site Configuration - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | R | | Supports DS-WP-A |
|  | | R1 | | Supports DM-OCD-A |
| 1 Object creation and deletion of Access Point, Access Zone, Access Door, and Credential Data Input objects is required. | | | | |
| **Data Sharing - Access Control Site Configuration - B** | | | | |
|  | | | R | Base Requirements |
|  | | | R | Supports DS-WP-B |
|  | | | BTL-C1 | Supports Access Point objects with writable configuration properties |
|  | | | BTL-C1 | Supports Access Zone objects with writable configuration properties |
|  | | | BTL-C1 | Supports Credential Data Input objects with writable configuration properties |
|  | | | BTL-C1 | Supports Access Door objects with writable configuration properties |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Data Sharing - Access Control Access Door - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Access Control Access Door - B** | | | | |
|  | | | R | Base Requirements |
|  | | | R | Supports DS-WP-B |
|  | | | R | Supports Access Door objects |
|  | | | | |
| **Data Sharing - Access Control Credential Data Input - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | R | | Supports DS-WP-A |
|  | | R | | Supports DS-COV-A |
|  | | | | |
| **Data Sharing - Access Control Credential Data Input - B** | | | | |
|  | | | R | Base Requirements |
|  | | | R | Supports DS-WP-B |
|  | | | R | Supports DS-COV-B for the Present\_Value of at least one Credential Data Input object |
|  | | | | |
| **Data Sharing - Lighting Output - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Lighting Output Status - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Advanced Lighting Output - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Lighting Output - B** | | | | |
|  | | R | | Base Requirements |
|  | | | | |
| **Data Sharing - Binary Lighting Output - B** | | | | |
|  | | R | | Base Requirements |
|  | | | | |
| **Data Sharing - Lighting View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Lighting Advanced View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Lighting Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Lighting Advanced Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Elevator View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Elevator Advanced View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | | | |
| **Data Sharing - Elevator Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |
| **Data Sharing - Elevator Advanced Modify - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-WP-A |
|  | | | | |

# Alarm and Event Management BIBBs

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Alarm and Event Management - Notification - A** | | |
|  | R | Base Requirements |
|  | R | Executes ConfirmedEventNotifications |
|  | R | Executes UnconfirmedEventNotifications |
|  | R | Processes intrinsically generated notifications |
|  | R | Processes algorithmically generated notifications |
|  | R | Processes CHANGE\_OF\_BITSTRING notifications |
|  | R | Processes CHANGE\_OF\_STATE notifications |
|  | R | Processes CHANGE\_OF\_VALUE notifications |
|  | R | Processes COMMAND\_FAILURE notifications |
|  | R | Processes FLOATING\_LIMIT notifications |
|  | R | Processes OUT\_OF\_RANGE notifications |
|  | R | Processes UNSIGNED\_RANGE notifications |
|  | R | Processes notifications that convey a proprietary Event Type |
|  | R | Processes event notifications with timestamps of the BACnetDateTime form |
|  | R | Processes event notifications with timestamps of the Time form |
|  | R | Processes event notifications with timestamps of the Sequence Number form |
|  | R | Processes EXTENDED notifications that convey a proprietary set of Event Values |
|  | R | Processes DOUBLE\_OUT\_OF\_RANGE notifications |
|  | R | Processes SIGNED\_OUT\_OF\_RANGE notifications |
|  | R | Processes UNSIGNED\_OUT\_OF\_RANGE notifications |
|  | R | Processes CHANGE\_OF\_CHARACTERSTRING notifications |
|  | R | Processes CHANGE\_OF\_STATUS\_FLAGS notifications |
|  | C1 | Processes CHANGE\_OF\_RELIABILITY notifications |
|  | C2 | Processes CHANGE\_OF\_DISCRETE\_VALUE notifications |
|  | C3 | Processes CHANGE\_OF\_TIMER notifications |
|  | C2 | Processes CHANGE\_OF\_RELIABILITY - FAULT\_OUT\_OF\_RANGE notifications |
|  | O | Processes CHANGE\_OF\_LIFE\_SAFETY notifications |
|  | O | Processes ACCESS\_EVENT notifications |
| 1 Required if the device claims protocol revision 13 or higher.  2 Required if the device claims protocol revision 16 or higher.  3 Required if the device claims protocol revision 17 or higher. | | |
| **Alarm and Event Management - Notification** - **Internal - B** | | |
|  | R | Base Requirements |
|  | R | Supports AE-INFO-B |
|  | R | Supports the Notification Class Object |
|  | C1 | Supports AE-ACK-B |
|  | C2 | Implements intrinsic alarming |
|  | C2 | Supports the Event Enrollment object |
|  | C3 | Implements the CHANGE\_OF\_BITSTRING algorithm |
|  | C3 | Implements the CHANGE\_OF\_STATE algorithm |
|  | C3 | Implements the numeric form of the CHANGE\_OF\_VALUE algorithm |
|  | C3 | Implements the Bit String form of the CHANGE\_OF\_VALUE algorithm |
|  | C3 | Implements the COMMAND\_FAILURE algorithm |
|  | C3 | Implements the FLOATING\_LIMIT algorithm |
|  | C3 | Implements the OUT\_OF\_RANGE algorithm |
|  | C3 | Implements a proprietary algorithm using complex notifications |
|  | C3 | Implements a standard or proprietary algorithm using extended notifications |
|  | C4 | Generates event notifications with timestamps of the BACnetDateTime form |
|  | N4 | Generates event notifications with timestamps of the Time form |
|  | C4 | Generates event notifications with timestamps of the Sequence Number form |
|  | O | Implements intrinsic alarming in an Analog object |
|  | O | Supports writable Event\_Parameters properties |
|  | C3 | Implements the DOUBLE\_OUT\_OF\_RANGE algorithm |
|  | C3 | Implements the SIGNED\_OUT\_OF\_RANGE algorithm |
|  | C3 | Implements the UNSIGNED\_OUT\_OF\_RANGE algorithm |
|  | C3 | Implements the CHANGE\_OF\_CHARACTERSTRING algorithm |
|  | C3 | Implements the CHANGE\_OF\_STATUS\_FLAGS algorithm |
|  | C3 | Implements the UNSIGNED\_RANGE algorithm |
|  | O | Supports Event\_Message\_Texts property |
|  | O | Supports Event\_Message\_Texts\_Config property |
|  | O | Implements intrinsic alarming in an Integer object |
|  | C3,9 | Implements the CHANGE\_OF\_RELIABILITY - NONE |
|  | C3,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_CHARACTERSTRING algorithm |
|  | C3,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_EXTENDED algorithm |
|  | C3,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LIFE\_SAFETY algorithm |
|  | C3,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATE algorithm |
|  | C3,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATUS\_FLAGS algorithm |
|  | C3,8,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LISTED algorithm |
|  | C3,9 | Supports CHANGE\_OF\_RELIABILITY in the Event Enrollment Object |
|  | C3, 6 | Implements the CHANGE\_OF\_DISCRETE\_VALUE algorithm |
|  | C3,7 | Implements the CHANGE\_OF\_TIMER algorithm |
|  | C3,6,9 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_OUT\_OF\_RANGE algorithm |
|  | O5 | Implements the Reliability\_Evaluation\_Inhibit property with Fault Reporting |
| 1 Required if EventNotifications with service parameter AckRequired = True can be issued.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 At least one of these options is required in order to claim conformance to this BIBB. It is recommended that a standard BACnet algorithm be used instead of a proprietary algorithm whenever possible.  4 At least one of these options must be supported to claim support for this BIBB. The BACnetDateTime form of the timestamp is the recommended option.  5 Protocol\_Revision 13 or higher must be claimed. IUT shall not claim this functionality if the only method of generating a fault condition is by writing to the Reliability property.  6 Protocol\_Revision 16 or higher must be claimed.  7 Protocol\_Revision 17 or higher must be claimed.  8 Protocol\_Revision 18 or higher must be claimed.  9 A device shall support CHANGE\_OF\_RELIABILITY in any object which generates event notifications and in which the Reliability property can take on a value other than NO\_FAULT\_DETECTED. | | |
| **Alarm and Event Management - Notification** - **External - B** | | |
|  | R | Base Requirements |
|  | R | Supports AE-N-I-B |
|  | R | Supports DS-RP-A for retrieving monitored values |
|  | R | Supports the Event Enrollment object |
|  | C1 | Implements the CHANGE\_OF\_BITSTRING algorithm |
|  | C1 | Implements the CHANGE\_OF\_STATE algorithm |
|  | C1 | Implements the numeric form of the CHANGE\_OF\_VALUE algorithm |
|  | C1 | Implements the Bit String form of the CHANGE\_OF\_VALUE algorithm |
|  | C1 | Implements the COMMAND\_FAILURE algorithm |
|  | C1 | Implements the FLOATING\_LIMIT algorithm |
|  | C1 | Implements the OUT\_OF\_RANGE algorithm |
|  | C1 | Implements the DOUBLE\_OUT\_OF\_RANGE algorithm |
|  | C1 | Implements the SIGNED\_OUT\_OF\_RANGE algorithm |
|  | C1 | Implements the UNSIGNED\_OUT\_OF\_RANGE algorithm |
|  | C1 | Implements the CHANGE\_OF\_CHARACTERSTRING algorithm |
|  | C1 | Implements the CHANGE\_OF\_STATUS\_FLAGS algorithm |
|  | C1 | Implements the UNSIGNED\_RANGE algorithm |
|  | C1,6 | Implements the CHANGE\_OF\_RELIABILITY - NONE |
|  | C1,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_CHARACTERSTRING algorithm |
|  | C1,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_EXTENDED algorithm |
|  | C1,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LIFE\_SAFETY algorithm |
|  | C1,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATE algorithm |
|  | C1,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATUS\_FLAGS algorithm |
|  | C1,5,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LISTED algorithm |
|  | C1,6 | Supports CHANGE\_OF\_RELIABILITY in the Event Enrollment object |
|  | C1,3 | Implements the CHANGE\_OF\_DISCRETE\_VALUE algorithm |
|  | C1,4 | Implements the CHANGE\_OF\_TIMER algorithm |
|  | C1, 3,6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_OUT\_OF\_RANGE algorithm |
|  | C1 | Implements a proprietary algorithm |
| 1 At least one of these options is required in order to claim conformance to this BIBB. It is recommended that a standard BACnet algorithm be used instead of a proprietary algorithm whenever possible.  3 Protocol\_Revision 16 or higher must be claimed.  4 Protocol\_Revision 17 or higher must be claimed.  5 Protocol\_Revision 18 or higher must be claimed.  6 A device shall support CHANGE\_OF\_RELIABILITY in any object which generates event notifications and in which the Reliability property can take on a value other than NO\_FAULT\_DETECTED. | | |
| **Alarm and Event Management - Acknowledge - A** | | |
|  | R | Base Requirements |
|  | BTL-R1 | Generates AcknowledgeAlarm requests with acknowledge timestamps of the BACnetDateTime form |
|  | N1 | Generates AcknowledgeAlarm requests with acknowledge timestamps of the Time form |
|  | N1 | Generates AcknowledgeAlarm requests with acknowledge timestamps of the Sequence Number form |
| 1 At least one of these options is required in order to claim conformance to this BIBB. The BACnetDateTime form of the timestamp is the only form allowed as the Time of Acknowledgement as of Protocol\_Revision 21. | | |
| **Alarm and Event Management - Acknowledge - B** | | |
|  | R | Base Requirements |
|  | | |
| **Alarm and Event Management - Alarm Summary - B** | | |
|  | R | Base Requirements |
|  | | |
| **Alarm and Event Management - Enrollment Summary - B** | | |
|  | R | Base Requirements |
|  | | |
| **Alarm and Event Management - Information - B** | | |
|  | R | Base Requirements |
|  | O | Supports AE-ACK-B |
|  | | |
| **Alarm and Event Management - Event Log View - A** | | |
|  | R | Base Requirements |
|  | R | Initiates ReadRange |
|  | C1 | Supports reading items by Time with a positive count |
|  | C1 | Supports reading items by Time with a negative count |
|  | C1 | Supports reading items by Position with a positive count |
|  | C1 | Supports reading items by Position with a negative count |
|  | C1 | Supports reading items by Sequence Number with a positive count |
|  | C1 | Supports reading items by Sequence Number with a negative count |
|  | O | Supports reading items with no range |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | |
| **Alarm and Event Management - Event Log View and Modify - A** | | |
|  | R | Base Requirements |
|  | BTL-R | Supports AE-ELV-A |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | | |
| **Alarm and Event Management - Event Log** - **Internal - B** | | |
|  | R | Base Requirements |
|  | R | Supports all forms of ReadRange |
|  | R | Executes ReadRange |
|  | O | Supports logging of ACK\_NOTIFICATION |
|  | O | Supports Start\_Time and Stop\_Time properties |
|  | C1 | Supports logging of events transmitted as an APDU |
|  | C1 | Supports logging of events never transmitted as an APDU |
| 1At least one of these options must be selected in order to claim this BIBB | | |
| **Alarm and Event Management - Event Log** - **External - B** | | |
|  | R | Base Requirements |
|  | R | Supports all forms of ReadRange |
|  | R | Executes ReadRange |
|  | R | Supports logging all Notifications |
|  | O | Supports Start\_Time and Stop\_Time properties |
|  | | |
| **Alarm and Event Management - View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-N-A |
|  | | |
| **Alarm and Event Management - View Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | | |
| **Alarm and Event Management - Advanced View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-VN-A |
|  | | |
| **Alarm and Event Management - Advanced View Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R1 | Supports DM-OCD-A |
| 1 Object creation and deletion of Event Enrollment, Notification Class, and Notification Forwarder objects is required. | | |
| **Alarm and Event Management - Alarm Summary View - A** | | |
|  | R | Base Requirements |
|  | R | Supports initiation of GetEventInformation service |
|  | R | Supports initiation of GetAlarmSummary service |
|  | | |
| **Alarm and Event Management - LifeSafety - A** | | |
|  | R | Base Requirements |
|  | C1 | Initiates LifeSafetyOperation requests targeting a single object |
|  | C1 | Initiates LifeSafetyOperation requests targeting all life safety objects in a device |
|  | R | Executes ConfirmedEventNotifications |
|  | R | Executes UnconfirmedEventNotifications |
|  | R | Processes intrinsically generated notifications |
|  | R | Processes algorithmically generated notifications |
|  | R | Processes event notifications with timestamps of the BACnetDateTime form |
|  | R | Processes event notifications with timestamps of the Time form |
|  | R | Processes event notifications with timestamps of the Sequence Number form |
|  | R | Supports AE-ACK-A |
|  | R | Supports AE-AS-A |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | |
| **Alarm and Event Management - LifeSafety - B** | | |
|  | R | Base Requirements |
|  | R | Supports the Notification Class Object |
|  | R | Supports AE-INFO-B |
|  | C1 | Implements intrinsic alarming |
|  | C1 | Supports the Event Enrollment object using the CHANGE\_OF\_LIFE\_SAFETY algorithm |
|  | C2 | Supports AE-ACK-B |
|  | C3 | Generates event notifications with timestamps of the BACnetDateTime form |
|  | N3 | Generates event notifications with timestamps of the Time form |
|  | C3 | Generates event notifications with timestamps of the Sequence Number form |
|  | O | Supports mode transition when Event State is maintained |
|  | O | Supports Event\_Message\_Texts property |
|  | O | Supports Event\_Message\_Texts\_Config property |
|  | O | Supports Re-alerting CHANGE\_OF\_LIFE\_SAFETY events |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 Required if EventNotifications with service parameter AckRequired = True can be issued.  3 At least one of these options must be supported to claim support for this BIBB. The BACnetDateTime form of the timestamp is the recommended option. | | |
| **Alarm and Event Management - Notification Forwarder - B** | | |
|  | R | Base Requirements |
|  | O | Supports forwarding of events received from the local device |
|  | | |
| **Alarm and Event Management - Notification Forwarder - Internal - B** | | |
|  | R | Base Requirements |
|  | O | Supports forwarding of events received from an external device |
|  | C1 | Supports non-configurable Process\_Identifier\_Filter Property |
|  | C1 | Supports configurable Process\_Identifier\_Filter Property |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | |
| **Alarm and Event Management - Configurable Recipient Lists - B** | | |
|  | R | Base Requirements |
|  | R | Supports DS-WP-B |
|  | R | Supports DM-DDB-A |
|  | C1 | Supports writable Recipient\_List property in Notification Class objects |
|  | C1 | Supports writable Recipient\_List property in Notification Forwarder objects |
|  | O | Supports DM-LM-B for Recipient\_List property |
| 1 Must contain at least one instance of one of these objects to claim this BIBB. | | |
| **Alarm and Event Management - Temporary Event Subscription - A** | | |
|  | R | Base Requirements |
|  | R | Supports DM-LM-A for Subscribed\_Recipients property |
|  | | |
| **Alarm and Event Management - Life Safety View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-N-A |
|  | R | Supports AE-LS-A |
|  | | |
| **Alarm and Event Management - Life Safety Advanced View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-AVN-A |
|  | R | Supports AE-LS-A |
|  | | |
| **Alarm and Event Management - Life Safety View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R | Supports AE-VM-A |
|  | | |
| **Alarm and Event Management - Life Safety Advanced View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R1 | Supports DM-OCD-A |
|  | R | Supports AE-AVM-A |
| 1 Object creation and deletion of Event Enrollment, Notification Class, and Notification Forwarder objects is required. | | |
| **Alarm and Event Management - Access Control - A** | | |
|  | R | Base Requirements |
|  | R | Executes ConfirmedEventNotifications |
|  | R | Executes UnconfirmedEventNotifications |
|  | R | Processes intrinsically generated notifications |
|  | R | Processes algorithmically generated notifications |
|  | R | Processes event notifications with timestamps of the BACnetDateTime form |
|  | R | Processes event notifications with timestamps of the Time form |
|  | R | Processes event notifications with timestamps of the Sequence Number form |
|  | R | Supports AE-ACK-A |
|  | | |
| **Alarm and Event Management - Access Control - B** | | |
|  | R | Base Requirements |
|  | R | Supports AE-INFO-B |
|  | R | Supports the Notification Class Object |
|  | C1 | Supports AE-ACK-B |
|  | C2 | Implements intrinsic alarming |
|  | C2 | Supports the Event Enrollment object |
|  | C3 | Generates Event Notifications with Timestamps of the BacnetDateTime Form |
|  | N3 | Generates Event Notifications with Timestamps of the Time Form |
|  | C3 | Generates Event Notifications with Timestamps of the Sequence Number Form |
|  | O | Supports Event\_Message\_Texts Property |
|  | O | Supports Event\_Message\_Texts\_Config Property |
| 1 Required if EventNotifications with service parameter AckRequired = True can be issued.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 At least one of these options must be supported to claim support for this BIBB. | | |
| **Alarm and Event Management - Access Control Advanced View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-AVN-A |
|  | R | Supports AE-AC-A |
|  | | |
| **Alarm and Event Management - Access Control View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-VM-A |
|  | | |
| **Alarm and Event Management - Access Control Advanced View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R1 | Supports DM-OCD-A |
|  | R | Supports AE-AVM-A |
| 1 Object creation and deletion of Event Enrollment, Notification Class, and Notification Forwarder objects is required. | | |
| **Alarm and Event Management - Elevator View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-N-A |
|  | | |
| **Alarm and Event Management - Elevator Advanced View Notifications - A** | | |
|  | R | Base Requirements |
|  | R | Supports AE-AVN-A |
|  | | |
| **Alarm and Event Management - Elevator View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R | Supports AE-VM-A |
|  | | |
| **Alarm and Event Management - Elevator Advanced View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R1 | Supports DM-OCD-A |
|  | R | Supports AE-AVM-A |
| 1 Object creation and deletion of Event Enrollment, Notification Class, and Notification Forwarder objects is required. | | |

# Scheduling BIBBs

| **Support** | **Listing** | | | **Option** | |
| --- | --- | --- | --- | --- | --- |
| **Scheduling - Advanced View Modify - A** | | | | | |
|  | | R | Base Requirements | | |
|  | | BTL-R | Supports SCHED-VM-A | | |
|  | | R1 | Supports DM-OCD-A | | |
| 1 Object creation and deletion of Schedule, Calendar, and Timer objects is required. | | | | | |
| **Scheduling - View Modify - A** | | | | | |
|  | | R | Base Requirements | | |
|  | | R | Supports DS-RP-A | | |
|  | | R | Supports DS-WP-A | | |
|  | | R | Is able to schedule any B-side device regardless of the claimed Protocol\_Revision in the B-side device. | | |
|  | | R | Is able to present and modify schedules that do not include the Exception\_Schedule property | | |
|  | | R | Is able to present and modify a Calendar Object | | |
|  | | R | Is able to present and modify schedules of Enumerated type | | |
|  | | R | Is able to present and modify schedules of Real type | | |
|  | | R | Is able to present and modify schedules of Unsigned32 type | | |
|  | | R1 | Is able to present and modify schedules of Boolean type | | |
|  | | O | Is able to present and modify schedules of Integer (signed) type | | |
|  | | O | Is able to present and modify schedules of Double type | | |
|  | | O | Is able to present and modify schedules of OctetString type | | |
|  | | O | Is able to present and modify schedules of CharacterString type | | |
|  | | O | Is able to present and modify schedules of BitString type | | |
|  | | O | Is able to present and modify schedules of Date type | | |
|  | | O | Is able to present and modify schedules of Time type | | |
|  | | O | Is able to present and modify schedules of BACnetObjectIdentifier type | | |
|  | | C2 | Is able to present and modify timers of Enumerated type | | |
|  | | C2 | Is able to present and modify timers of Real type | | |
|  | | C2 | Is able to present and modify timers of Unsigned type | | |
|  | | C2 | Is able to present and modify timers of Boolean type | | |
|  | | O3 | Is able to present and modify timers of Integer (signed) type | | |
|  | | O3 | Is able to present and modify timers of Double type | | |
|  | | O3 | Is able to present and modify timers of OctetString type | | |
|  | | O3 | Is able to present and modify timers of CharacterString type | | |
|  | | O3 | Is able to present and modify timers of BitString type | | |
|  | | O3 | Is able to present and modify timers of DatePattern type | | |
|  | | O3 | Is able to present and modify timers of TimePattern type | | |
|  | | O3 | Is able to present and modify timers of BACnetObjectIdentifier type | | |
|  | | O3 | Is able to present and modify timers of Constructed values | | |
|  | | O3 | Is able to present and modify timers of BACnetDateTime type | | |
|  | | O3 | Is able to present and modify timers of BACnetLightingCommand type | | |
| 1 BTL-R if the IUT claims a revision before Protocol\_Revision 20.  2 Required if the IUT claims Protocol\_Revision 17 or higher.  3 Protocol\_Revision 17 or higher must be claimed. | | | | | |
| **Scheduling - Weekly Schedule - A** | | | | | |
|  | | R | | | Base Requirements |
|  | | R | | | Supports DS-RP-A |
|  | | R | | | Supports DS-WP-A |
|  | | R | | | Is able to schedule any B-side device with a Protocol\_Revision less than or equal to its own Protocol\_Revision |
|  | | R | | | Is able to present and modify Weekly\_Schedule of Enumerated type |
|  | | R | | | Is able to present and modify Weekly\_Schedule of REAL type |
|  | | C1 | | | Is able to present and modify Weekly\_Schedule of BOOLEAN type |
|  | | C1 | | | Is able to present and modify Weekly\_Schedule of Unsigned type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of INTEGER (signed) type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of Double type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of Octet String type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of Character String type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of Bit String type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of Date type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of Time type |
|  | | O | | | Is able to present and modify Weekly\_Schedule of BACnetObjectIdentifier type |
| 1 Required if the IUT claims Protocol\_Revision 20 or higher. | | | | | |
| **Scheduling - Internal - B** | | | | | |
|  | R | | | Base Requirements | |
|  | BTL-R | | | Supports concurrent weekly and exception schedules | |
|  | BTL-R | | | Supports reference to Calendar object | |
|  | O | | | Supports configurable Effective\_Period | |
|  | O | | | Is able to schedule values of different datatypes (not simultaneously) | |
|  | O | | | Supports non-empty List\_Of\_Object\_Property\_References property | |
|  | C1 | | | Is able to schedule NULL values | |
|  | C1 | | | Is able to schedule BOOLEAN values | |
|  | C1, 2 | | | Is able to schedule Unsigned values | |
|  | C1, 2 | | | Is able to schedule INTEGER (signed) values | |
|  | C1 | | | Is able to schedule REAL values | |
|  | C1 | | | Is able to schedule Double values | |
|  | C1 | | | Is able to schedule Octet String values | |
|  | C1 | | | Is able to schedule Character String values | |
|  | C1 | | | Is able to schedule Bit String values | |
|  | C1, 3 | | | Is able to schedule Enumerated values | |
|  | C1 | | | Is able to schedule Date values | |
|  | C1 | | | Is able to schedule Time values | |
|  | C1 | | | Is able to schedule BACnetObjectIdentifier values | |
|  | C4 | | | Supports DM-TS-B | |
|  | C4 | | | Supports DM-UTC-B | |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 Values greater than 32 bit Unsigned or INTEGER might not be interoperable or configurable.  3 Values greater than 16 bit Enumerated might not be interoperable or configurable.  4 At least one of these options is required in order to claim conformance to this BIBB. | | | | | |
| **Scheduling - External - B** | | | | | |
|  | R | | | Base Requirements | |
|  | R | | | Supports DS-WP-A | |
|  | R | | | Supports SCHED-I-B | |
|  | R | | | Supports writable List\_Of\_Object\_Property\_References property | |
|  | R1 | | | Is able to schedule NULL values | |
|  | R1 | | | Is able to schedule BOOLEAN values | |
|  | R1 | | | Is able to schedule Unsigned values | |
|  | R1 | | | Is able to schedule REAL values | |
|  | R1 | | | Is able to schedule Enumerated values | |
|  | S | | | Is able to schedule values of different datatypes (not simultaneously) | |
|  | S | | | Is able to schedule INTEGER (signed) values | |
|  | S | | | Is able to schedule Double values | |
|  | S | | | Is able to schedule Character String values | |
|  | S | | | Is able to schedule Bit String values | |
|  | O | | | Is able to schedule Octet String values | |
|  | O | | | Is able to schedule Date values | |
|  | O | | | Is able to schedule Time values | |
|  | O | | | Is able to schedule BACnetObjectIdentifier values | |
| 1 BTL-R if the IUT claims a revision before Protocol\_Revision 20. | | | | | |
| **Scheduling - Weekly Schedule - Internal - B** | | | | | |
|  | R1 | | | Base Requirements | |
|  | R | | | Supports writable Priority\_For\_Writing | |
|  | R | | | Contains no object where Exception\_Schedule property is present | |
|  | C2 | | | Supports DM-TS-B | |
|  | C2 | | | Supports DM-UTC-B | |
|  | O | | | Supports configurable Effective\_Period | |
|  | O | | | Is able to schedule values of different datatypes (not simultaneously) | |
|  | O | | | Is able to schedule NULL values | |
|  | O | | | Is able to schedule BOOLEAN values | |
|  | O | | | Is able to schedule Unsigned values | |
|  | O | | | Is able to schedule INTEGER (signed) values | |
|  | O | | | Is able to schedule REAL values | |
|  | O | | | Is able to schedule Double values | |
|  | O | | | Is able to schedule Octet String values | |
|  | O | | | Is able to schedule Character String values | |
|  | O | | | Is able to schedule Bit String values | |
|  | O | | | Is able to schedule Enumerated values | |
|  | O | | | Is able to schedule Date values | |
|  | O | | | Is able to schedule Time values | |
|  | O | | | Is able to schedule BACnetObjectIdentifier values | |
| 1 This BIBB can only be claimed if SCHED-I-B is not claimed.  2 At least one of these options is required in order to claim conformance to this BIBB. | | | | | |
| **Scheduling - Readonly - B** | | | | | |
|  | R5 | | | Base Requirements | |
|  | C1 | | | Supports DM-TS-B | |
|  | C1 | | | Supports DM-UTC-B | |
|  | C2 | | | Can be made to contain a schedule that schedules BOOLEAN values | |
|  | C2 | | | Can be made to contain a schedule that schedules Unsigned values | |
|  | C2 | | | Can be made to contain a schedule that schedules INTEGER (signed) values | |
|  | C2 | | | Can be made to contain a schedule that schedules REAL values | |
|  | C2 | | | Can be made to contain a schedule that schedules Double values | |
|  | C2 | | | Can be made to contain a schedule that schedules Octet String values | |
|  | C2 | | | Can be made to contain a schedule that schedules Character String values | |
|  | C2 | | | Can be made to contain a schedule that schedules Bit String values | |
|  | C2 | | | Can be made to contain a schedule that schedules Enumerated values | |
|  | C2 | | | Can be made to contain a schedule that schedules Date values | |
|  | C2 | | | Can be made to contain a schedule that schedules Time values | |
|  | C2 | | | Can be made to contain a schedule that schedules BACnetObjectIdentifier values | |
|  | C3 | | | Can be made to contain a non-empty Weekly\_Schedule property | |
|  | C3 | | | Can be made to contain a non-empty Exception\_Schedule | |
|  | C4 | | | Can be made to contain an Exception\_Schedule property with a Calendar Reference | |
|  | C4 | | | Can be made to contain an Exception\_Schedule property with a WeekNDay | |
|  | C4 | | | Can be made to contain an Exception\_Schedule property with a DateRange | |
|  | C4 | | | Can be made to contain an Exception\_Schedule property with a Date | |
|  | O | | | Can be made to contain a schedule that schedules NULL values | |
|  | O | | | Can be made to contain an Exception\_Schedule property with two or more BACnetSpecialEvents entries | |
|  | O | | | Supports concurrent weekly and exception schedules | |
| 1 At least one of these options is required in order to claim conformance to this BIBB  2 At least one of these options is required in order to claim conformance to this BIBB  3 At least one of these options is required in order to claim conformance to this BIBB  4 At least one of these options is required if the IUT can be made to contain a non-empty Exception\_Schedule  5 This BIBB can only be claimed if SCHED-I-B is not claimed | | | | | |
| **Scheduling - Schedule - A** | | | | | |
|  | | R1 | | | Base Requirements |
| 1 This BIBB can be claimed if SCHED-VM-A is claimed. | | | | | |
| **Scheduling - Timer - Internal - B** | | | | | |
|  | | R | Base Requirements | | |
|  | | R | Supports writable Priority\_For\_Writing property | | |
|  | | R | Supports writable Default\_Timeout property | | |
|  | | | | | |
| **Scheduling - Timer - External - B** | | | | | |
|  | | R | Base Requirements | | |
|  | | R | Supports SCHED-TMR-I-B | | |
|  | | R | Supports DS-WP-A | | |
|  | | R | Supports writable List\_Of\_Object\_Property\_References property | | |
|  | | R | Supports references to objects in external devices | | |
|  | | | | | |

# Trending BIBBs

| **Support** | **Listing** | | **Option** | |
| --- | --- | --- | --- | --- |
| **Trending - View - A** | | | | |
|  | R | | Base Requirements | |
|  | R | | Initiates ReadRange | |
|  | R | | Interoperates with Trend Logs | |
|  | R | | Interoperates with Trend Log Multiple objects | |
|  | C1 | | Supports reading items by Time with a positive count | |
|  | C1 | | Supports reading items by Time with a negative count | |
|  | C1 | | Supports reading items by Position with a positive count | |
|  | C1 | | Supports reading items by Position with a negative count | |
|  | C1 | | Supports reading items by Sequence Number with a positive count | |
|  | C1 | | Supports reading items by Sequence Number with a negative count | |
|  | O | | Supports reading items with no range | |
|  | O | | Is able to present Double datatypes in trend logging objects | |
|  | O | | Is able to present Octet String datatypes in trend logging objects | |
|  | O | | Is able to present Character String datatypes in trend logging objects | |
|  | O | | Is able to present Date datatypes in trend logging objects | |
|  | O | | Is able to present Time datatypes in trend logging objects | |
|  | O | | Is able to present BACnetObjectIdentifier datatypes in trend logging objects | |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | | |
| **Trending - Advanced View and Modify - A** | | | | |
|  | R | | Base Requirements | |
|  | BTL-R | | Supports T-V-A | |
|  | R | | Supports DS-RP-A | |
|  | R | | Supports DS-WP-A | |
|  | R1 | | Supports DM-OCD-A | |
| 1 Object creation and deletion of Trend Log, Trend Log Multiple, Event Enrollment, and Notification Class objects is required. | | | | |
| **Trending - Viewing and Modifying Trends - Internal - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports all forms of ReadRange | |
|  | R | | Executes ReadRange | |
|  | C1 | | Supports periodic logging (polling) | |
|  | C1 | | Supports COV logging of local properties | |
|  | C1 | | Supports triggered logging | |
|  | C2 | | Supports Start\_Time and Stop\_Time properties | |
|  | O | | Supports clock-aligned logging | |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 These properties must be present and be writable if able to monitor a BACnet Property. | | | | |
| **Trending - Viewing and Modifying Trends - External - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Is able to trend REAL values | |
|  | R1 | | Is able to trend Unsigned values | |
|  | R1 | | Is able to trend INTEGER (signed) values | |
|  | R | | Is able to trend BOOLEAN values | |
|  | R | | Is able to trend Bit String values | |
|  | R2 | | Is able to trend Enumerated values | |
|  | R | | Is able to trend NULL values | |
|  | O | | Is able to trend Double values | |
|  | O | | Is able to trend Character String values | |
|  | O | | Is able to trend Octet String values | |
|  | O | | Is able to trend Date values | |
|  | O | | Is able to trend Time values | |
|  | O | | Is able to trend BACnetObjectIdentifier values | |
|  | S | | Supports COV logging of remote property values | |
| 1 Trending of 32 bit Unsigned and INTEGER values is minimally required.  2 Trending of 16-bit Enumerated values is minimally required. | | | | |
| **Trending - Automated Trend Retrieval - A** | | | | |
|  | R | | Base Requirements | |
|  | R | | Initiates ReadRange | |
|  | R | | Processes BUFFER\_READY event notifications from devices claiming Protocol\_Revision 3 or higher. | |
|  | R | | Processes ConfirmedEventNotification of BUFFER\_READY events. | |
|  | O | | Processes UnconfirmedEventNotification of BUFFER\_READY events. | |
|  | | | | |
| **Trending - Automated Trend Retrieval - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports T-VMT-I-B | |
|  | R | | Supports the Notification Class Object | |
|  | C1 | | Implements intrinsic alarming | |
|  | C1 | | Implements algorithmic alarming | |
|  | C2 | | Generates event notifications with timestamps of the BACnetDateTime form | |
|  | N2 | | Generates event notifications with timestamps of the Time form | |
|  | N2 | | Generates event notifications with timestamps of the Sequence Number form | |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options must be supported to claim support for this BIBB. The BACnetDateTime form of the timestamp is the recommended option. | | | | |
| **Trending - Viewing and Modifying Multiple Values - Internal - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports all forms of ReadRange | |
|  | R | | Executes ReadRange | |
|  | C1 | | Supports periodic logging (polling) | |
|  | C1 | | Supports triggered logging | |
|  | O | | Supports clock-aligned logging | |
|  | O | | Supports Start\_Time and Stop\_Time properties | |
|  | C2 | | Is able to trend REAL datatypes | |
|  | C2,3 | | Is able to trend Unsigned datatypes | |
|  | C2,3 | | Is able to trend INTEGER datatypes | |
|  | C2 | | Is able to trend BOOLEAN datatypes | |
|  | C2 | | Is able to trend Bit String datatypes | |
|  | C2,4 | | Is able to trend Enumerated datatypes | |
|  | C2 | | Is able to trend NULL datatypes | |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB.  3 Trending of 32 bit Unsigned and INTEGER values is minimally required.  4 Trending of 16-bit Enumerated values is minimally required. | | | | |
| **Trending - Viewing and Modifying Multiple Values - External - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports T-VMMV-I-B | |
|  | C1 | | Is able to trend REAL datatypes | |
|  | C1,2 | | Is able to trend Unsigned datatypes | |
|  | C1,2 | | Is able to trend INTEGER datatypes | |
|  | C1 | | Is able to trend BOOLEAN datatypes | |
|  | C1 | | Is able to trend Bit String datatypes | |
|  | C1,3 | | Is able to trend Enumerated datatypes | |
|  | C1 | | Is able to trend NULL datatypes | |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 Trending of 32 bit Unsigned and INTEGER values is minimally required.  3 Trending of 16-bit Enumerated values is minimally required. | | | | |
| **Trending - Automated Multiple Value Retrieval - A** | | | | |
|  | R | | Base Requirements | |
|  | R | | Initiates ReadRange | |
|  | R | | Processes ConfirmedEventNotification of BUFFER\_READY events. | |
|  | O | | Processes UnconfirmedEventNotification of BUFFER\_READY events. | |
|  | | | | |
| **Trending - Automated Multiple Value Retrieval - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports T-VMMV-I-B | |
|  | R | | Supports the Notification Class object | |
|  | C1 | | Implements intrinsic alarming | |
|  | C1 | | Implements algorithmic alarming | |
|  | C2 | | Generates event notifications with timestamps of the BACnetDateTime form | |
|  | N2 | | Generates event notifications with timestamps of the Time form | |
|  | N2 | | Generates event notifications with timestamps of the Sequence Number form | |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options must be supported to claim support for this BIBB. The BACnetDateTime form of the timestamp is the recommended option. | | | | |
| **Trending - Archival - A** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports T-ATR-A | |
|  | R | | Supports T-AMVR-A | |
|  | | | | |
| **Trending - Viewing and Modifying Trends - A** | | | | |
|  | | N1 | | Base Requirements |
| 1 This BIBB is deprecated but can be claimed if T-V-A is claimed. | | | | |
| **Trending - Viewing and Modifying Multiple Values - A** | | | | |
|  | | N1 | | Base Requirements |
| 1 This BIBB is deprecated but can be claimed if T-V-A is claimed. | | | | |

# Device Management BIBBs

| **Support** | | **Listing** | **Option** |
| --- | --- | --- | --- |
| **Device Management - Dynamic Device Binding - A** | | | |
|  | | R | Base Requirements |
|  | | BTL-R | Initiates Who-Is service request with range parameters |
|  | | O | Initiates unicast Who-Is service request with no range parameters |
|  | | N | Initiates broadcast Who-Is service request with no range parameters |
|  | | | |
| **Device Management - Dynamic Device Binding - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Dynamic Object Binding - A** | | | |
|  | | R | Base Requirements |
|  | | C1 | Initiates Who-Has service request with Object Identifier parameter and no range parameters |
|  | | C1 | Initiates Who-Has service request with Object Identifier parameter with range parameters |
|  | | C1 | Initiates Who-Has service request with Object Name parameter and no range parameters |
|  | | C1 | Initiates Who-Has service request with Object Name parameter with range parameters |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | |
| **Device Management - Dynamic Object Binding - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Automatic Device Mapping - A** | | | |
|  | | R | Base Requirements |
|  | | R | Supports DS-RP-A |
|  | | | |
| **Device Management - Automatic Network Mapping - A** | | | |
|  | | R | Base Requirements |
|  | | R | Supports DM-DDB-A |
|  | | | |
| **Device Management - Time Synchronization - A** | | | |
|  | | R | Base Requirements |
|  | | R | Supports DM-UTC-A |
|  | | | |
| **Device Management - Time Synchronization - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - UTC Time Synchronization - A** | | | |
|  | | R | Base Requirements |
|  | | R | Supports DM-TS-A |
|  | | | |
| **Device Management - UTC Time Synchronization - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Automatic Time Synchronization - A** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Manual Time Synchronization - A** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Device Communication Control - A** | | | |
|  | | R | Base Requirements |
|  | | BTL-R | Supports sending a DeviceCommunicationControl service request with an arbitrary password |
|  | | R | Supports sending a DeviceCommunicationControl service request with a finite timeout |
|  | | S | Supports DM-RD-A |
|  | | O | Supports sending a DeviceCommunicationControl service request with no password |
|  | | O | Supports sending a DeviceCommunicationControl service request with an infinite timeout |
|  | | | |
| **Device Management - Device Communication Control - B** | | | |
|  | | R | Base Requirements |
|  | | C1 | Supports receiving a DeviceCommunicationControl service request with a password |
|  | | C1 | Supports receiving a DeviceCommunicationControl service request with no password |
|  | | R | Supports receiving a DeviceCommunicationControl service request with a finite duration |
|  | | O | Supports receiving a DeviceCommunicationControl service request with an indefinite duration |
|  | | O | Supports DM-RD-B |
|  | | R | Supports receiving a DeviceCommunicationControl service request specifying DISABLE\_INITIATION. |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | | |
| **Device Management - Reinitialize Device - A** | | | |
|  | | R | Base Requirements |
|  | | R | Supports sending a ReinitializeDevice service request with an arbitrary password |
|  | | O | Supports sending a ReinitializeDevice service request with no password |
|  | | | |
| **Device Management - Reinitialize Device - B** | | | |
|  | | R | Base Requirements |
|  | | C1 | Implements ReinitializeDevice WARMSTART with a password |
|  | | C1 | Implements ReinitializeDevice WARMSTART with no password |
|  | | C2 | Implements ReinitializeDevice COLDSTART with a password |
|  | | C2 | Implements ReinitializeDevice COLDSTART with no password |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB. | | | |
| **Device Management - Backup and Restore - A** | | | |
|  | | R | Base Requirements |
|  | | O | Supports User Initiated Abort Backup |
|  | | O | Supports User Initiated Abort Restore |
|  | | | |
| **Device Management - Backup and Restore - B** | | | |
|  | | R | Base Requirements |
|  | | C1 | Supports password protected Backup |
|  | | C1 | Supports non-password protected Backup |
|  | | C2 | Supports password protected Restore |
|  | | C2 | Supports non-password protected Restore |
|  | | O | Changes operational behavior during a Backup procedure |
|  | | O | Changes operational behavior during a Restore procedure |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB. | | | |
| **Device Management - Restart - A** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Restart - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Object Creation and Deletion - A** | | | |
|  | | R | Base Requirements |
|  | | R | Can create objects using Object\_Identifier with no initial values |
|  | | S | Can create objects using Object\_Type with no initial values |
|  | | S | Can create objects by Object\_Identifier with initial values which includes Object\_Name |
|  | | S | Can create objects by Object\_Type with initial values which includes Object\_Name |
|  | | C1 | Can create and delete Accumulator objects |
|  | | C1 | Can create and delete Analog Input objects |
|  | | C1 | Can create and delete Analog Output objects |
|  | | C1 | Can create and delete Analog Value objects |
|  | | C1 | Can create and delete Averaging objects |
|  | | C1 | Can create and delete Binary Input objects |
|  | | C1 | Can create and delete Binary Output objects |
|  | | C1 | Can create and delete Binary Value objects |
|  | | C1 | Can create and delete Calendar objects |
|  | | C1 | Can create and delete Command objects |
|  | | C1 | Can create and delete Event Enrollment objects |
|  | | C1,2 | Can create and delete File objects |
|  | | C1 | Can create and delete Group objects |
|  | | C1 | Can create and delete Life Safety Point objects |
|  | | C1 | Can create and delete Life Safety Zone objects |
|  | | C1 | Can create and delete Loop objects |
|  | | C1 | Can create and delete Multi State Input objects |
|  | | C1 | Can create and delete Multi State Output objects |
|  | | C1 | Can create and delete Multi State Value objects |
|  | | C1 | Can create and delete Notification Class objects |
|  | | C1 | Can create and delete Program objects |
|  | | C1 | Can create and delete Pulse Converter objects |
|  | | C1 | Can create and delete Schedule objects |
|  | | C1 | Can create and delete Trend Log objects |
|  | | C1 | Can create and delete Structured View objects |
|  | | C1 | Can create and delete Load Control objects |
|  | | C1 | Can create and delete Access Door objects |
|  | | C1 | Can create and delete Proprietary objects |
|  | | C1 | Can create and delete Event Log objects |
|  | | C1 | Can create and delete Trend Log Multiple objects |
|  | | C1 | Can create and delete CharacterString Value objects |
|  | | C1 | Can create and delete DateTime Value objects |
|  | | C1 | Can create and delete Large Analog Value objects |
|  | | C1 | Can create and delete BitString Value objects |
|  | | C1 | Can create and delete OctetString Value objects |
|  | | C1 | Can create and delete Time Value objects |
|  | | C1 | Can create and delete Integer Value objects |
|  | | C1 | Can create and delete Positive Integer Value objects |
|  | | C1 | Can create and delete Date Value objects |
|  | | C1 | Can create and delete DateTime Pattern Value objects |
|  | | C1 | Can create and delete Time Pattern Value objects |
|  | | C1 | Can create and delete Date Pattern Value objects |
|  | | C1 | Can create and delete Network Security objects |
|  | | C1 | Can create and delete Global Group objects |
|  | | C1 | Can create and delete Access Point objects |
|  | | C1 | Can create and delete Access Zone objects |
|  | | C1 | Can create and delete Access User objects |
|  | | C1 | Can create and delete Access Rights objects |
|  | | C1 | Can create and delete Access Credential objects |
|  | | C1 | Can create and delete Credential Data objects |
|  | | C1 | Can create and delete Notification Forwarder objects |
|  | | C1 | Can create and delete Alert Enrollment objects |
|  | | C1 | Can create and delete Channel objects |
|  | | C1 | Can create and delete Lighting Output objects |
|  | | C1 | Can create and delete Binary Lighting Output objects |
|  | | C1 | Can create and delete Network Port objects |
|  | | C1 | Can create and delete Timer objects |
|  | | C1 | Can create and delete Elevator Group objects |
|  | | C1 | Can create and delete Lift objects |
|  | | C1 | Can create and delete Escalator objects |
|  | | C1 | Can create and delete Staging objects |
|  | | C1 | Can create and delete Audit Reporter objects |
|  | | C1 | Can create and delete Audit Log objects |
|  | | C1 | Can create and delete Color objects |
|  | | C1 | Can create and delete Color Temperature objects |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 IUT shall not claim this BIBB if the only objects created are File objects for the purpose of initiating the device restore procedure. | | | |
| **Device Management - Object Creation and Deletion - B** | | | |
|  | | R | Base Requirements |
|  | | R | Supports object creation using Object\_Type |
|  | | R | Supports object creation using Object\_Identifier |
|  | | R | Supports object deletion for each object type that it supports creation of |
|  | | C1 | Supports object creation and deletion of the Accumulator object |
|  | | C1 | Supports object creation and deletion of the Analog Input object |
|  | | C1 | Supports object creation and deletion of the Analog Output object |
|  | | C1 | Supports object creation and deletion of the Analog Value object |
|  | | C1 | Supports object creation and deletion of the Averaging object |
|  | | C1 | Supports object creation and deletion of the Binary Input object |
|  | | C1 | Supports object creation and deletion of the Binary Output object |
|  | | C1 | Supports object creation and deletion of the Binary Value object |
|  | | C1 | Supports object creation and deletion of the Calendar object |
|  | | C1 | Supports object creation and deletion of the Command object |
|  | | C1 | Supports object creation and deletion of the Event Enrollment object |
|  | | C1 | Supports object creation and deletion of the File object |
|  | | C1 | Supports object creation and deletion of the Group object |
|  | | C1 | Supports object creation and deletion of the Life Safety Point object |
|  | | C1 | Supports object creation and deletion of the Life Safety Zone object |
|  | | C1 | Supports object creation and deletion of the Loop object |
|  | | C1 | Supports object creation and deletion of the Multi State Input object |
|  | | C1 | Supports object creation and deletion of the Multi State Output object |
|  | | C1 | Supports object creation and deletion of the Multi State Value object |
|  | | C1 | Supports object creation and deletion of the Notification Class object |
|  | | C1 | Supports object creation and deletion of the Program object |
|  | | C1 | Supports object creation and deletion of the Pulse Converter object |
|  | | C1 | Supports object creation and deletion of the Schedule object |
|  | | C1 | Supports object creation and deletion of the Trend Log object |
|  | | C1 | Supports object creation and deletion of the Structured View object |
|  | | C1 | Supports object creation and deletion of the Load Control object |
|  | | C1 | Supports object creation and deletion of the Access Door object |
|  | | C1 | Supports object creation and deletion of Proprietary objects |
|  | | C1 | Supports object creation and deletion of the Event Log object |
|  | | C1 | Supports object creation and deletion of the Trend Log Multiple object |
|  | | C1 | Supports object creation and deletion of the CharacterString Value object |
|  | | C1 | Supports object creation and deletion of the DateTime Value object |
|  | | C1 | Supports object creation and deletion of the Large Analog Value object |
|  | | C1 | Supports object creation and deletion of the BitString Value object |
|  | | C1 | Supports object creation and deletion of the OctetString Value object |
|  | | C1 | Supports object creation and deletion of the Time Value object |
|  | | C1 | Supports object creation and deletion of the Integer Value object |
|  | | C1 | Supports object creation and deletion of the Positive Integer Value object |
|  | | C1 | Supports object creation and deletion of the Date Value object |
|  | | C1 | Supports object creation and deletion of the DateTime Pattern Value object |
|  | | C1 | Supports object creation and deletion of the Time Pattern Value object |
|  | | C1 | Supports object creation and deletion of the Date Pattern Value object |
|  | | C1 | Supports object creation and deletion of the Network Security object |
|  | | C1 | Supports object creation and deletion of the Global Group object |
|  | | C1 | Supports object creation and deletion of the Access Point object |
|  | | C1 | Supports object creation and deletion of the Access Zone object |
|  | | C1 | Supports object creation and deletion of the Access User object |
|  | | C1 | Supports object creation and deletion of the Access Rights object |
|  | | C1 | Supports object creation and deletion of the Access Credential object |
|  | | C1 | Supports object creation and deletion of the Credential Data object |
|  | | C1 | Supports object creation and deletion of the Notification Forwarder object |
|  | | C1 | Supports object creation and deletion of the Alert Enrollment object |
|  | | C1 | Supports object creation and deletion of the Channel object |
|  | | C1 | Supports object creation and deletion of the Lighting Output object |
|  | | C1,2 | Supports object creation and deletion of the Binary Lighting Output object |
|  | | C1,3 | Supports object creation and deletion of the Network Port object |
|  | | C1,3 | Supports object creation and deletion of the Timer object |
|  | | C1,4 | Supports object creation and deletion of the Elevator Group object |
|  | | C1,4 | Supports object creation and deletion of the Lift object |
|  | | C1,4 | Supports object creation and deletion of the Escalator object |
|  | | C1,5 | Supports object creation and deletion of the Staging object |
|  | | C1,5 | Supports object creation and deletion of the Audit Reporter object |
|  | | C1,5 | Supports object creation and deletion of the Audit Log object |
|  | | C1,6 | Supports object creation and deletion of the Color object |
|  | | C1,6 | Supports object creation and deletion of the Color Temperature object |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 Protocol\_Revision 16 or higher must be claimed.  3 Protocol\_Revision 17 or higher must be claimed.  4 Protocol\_Revision 18 or higher must be claimed.  5 Protocol\_Revision 20 or higher must be claimed.  6 Protocol\_Revision 24 or higher must be claimed. | | | |
| **Device Management - List Manipulation - A** | | | |
|  | | R | Base Requirements |
|  | | C1 | Supports adding and removing Notification Class / Recipient\_List entries |
|  | | C1 | Supports adding and removing Schedule / List\_Of\_Object\_Property\_References entries |
|  | | C1 | Supports adding and removing Calendar / Date\_List entries |
|  | | C1 | Supports adding and removing Device / Time\_Synchronization\_Recipients entries |
|  | | C1 | Supports adding and removing Device / UTC\_Time\_Synchronization\_Recipients entries |
|  | | C1 | Supports adding and removing Device / Restart\_Notification\_Recipients entries |
|  | | C1 | Supports adding and removing Device / Manual\_Subordinate\_Address\_Binding entries |
|  | | C1 | Supports adding and removing Group / List\_Of\_Group\_Members entries |
|  | | C1 | Supports adding and removing Life Safety Point / Life\_Safety\_Alarm\_Values entries |
|  | | C1 | Supports adding and removing Life Safety Point / Alarm\_Values entries |
|  | | C1 | Supports adding and removing Life Safety Point / Fault\_Values entries |
|  | | C1 | Supports adding and removing Life Safety Point / Member\_Of entries |
|  | | C1 | Supports adding and removing Life Safety Zone / Life\_Safety\_Alarm\_Values entries |
|  | | C1 | Supports adding and removing Life Safety Zone / Alarm\_Values entries |
|  | | C1 | Supports adding and removing Life Safety Zone / Fault\_Values entries |
|  | | C1 | Supports adding and removing Life Safety Zone / Member\_Of entries |
|  | | C1 | Supports adding and removing Multi-State Input / Alarm\_Values entries |
|  | | C1 | Supports adding and removing Multi-State Input / Fault\_Values entries |
|  | | C1 | Supports adding and removing Multi-State Value / Alarm\_Values entries |
|  | | C1 | Supports adding and removing Multi-State Value / Fault\_Values entries |
|  | | C1 | Supports adding and removing entries in proprietary list properties of primitive datatypes |
|  | | C1 | Supports adding and removing Global Group / COVU\_Recipients entries |
|  | | C1 | Supports adding and removing Device / VT\_Classes\_Supported entries |
|  | | C1 | Supports adding and removing Device / Active\_VT\_Sessions entries |
|  | | C1 | Supports adding and removing Life Safety Zone / Zone\_Members entries |
|  | | C1 | Supports adding and removing Notification Forwarder / Recipient\_List entries |
|  | | C1 | Supports adding and removing Notification Forwarder / Subscribed\_Recipients entries |
|  | | C1 | Supports adding and removing Access Door / Masked\_Alarm\_Values entries |
|  | | C1 | Supports adding and removing Access Door / Alarm\_Values entries |
|  | | C1 | Supports adding and removing Access Door / Fault\_Values entries |
|  | | C1 | Supports adding and removing Access Point / Access\_Alarm\_Events entries |
|  | | C1 | Supports adding and removing Access Point / Access\_Transaction\_Events entries |
|  | | C1 | Supports adding and removing Access Point / Failed\_Attempt\_Events entries |
|  | | C1 | Supports adding and removing Access Zone / Credentials\_In\_Zone entries |
|  | | C1 | Supports adding and removing Access Zone / Entry\_Points entries |
|  | | C1 | Supports adding and removing Access Zone / Exit\_Points entries |
|  | | C1 | Supports adding and removing Access Zone / Alarm\_Values entries |
|  | | C1 | Supports adding and removing Access User / Members entries |
|  | | C1 | Supports adding and removing Access User / Member\_Of entries |
|  | | C1 | Supports adding and removing Access User / Credentials entries |
|  | | C1 | Supports adding and removing Access Credential / Authorization\_Exemptions entries |
|  | | C1 | Supports adding and removing Access Credential / Reason\_For\_Disable entries |
|  | | C1,2 | Supports adding and removing Network Port / BBMD\_Broadcast\_Distribution\_Table entries |
|  | | C1,2 | Supports adding and removing Network Port / Manual\_Subordinate\_Address\_Binding entries |
|  | | C1,2 | Supports adding and removing Network Port / Virtual\_MAC\_Address\_Table entries |
|  | | C1,2 | Supports adding and removing Timer / List\_Of\_Object\_Property\_References entries |
|  | | C1,2 | Supports adding and removing Timer / Alarm\_Values entries |
|  | | C1,3 | Supports adding and removing Lift / Fault\_Signals entries |
|  | | C1,3 | Supports adding and removing Escalator / Fault\_Signals entries |
|  | | C1,3 | Supports adding and removing Elevator Group / Landing\_Calls entries |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 Protocol\_Revision 17 or higher must be claimed.  3 Protocol\_Revision 18 or higher must be claimed. | | | |
| **Device Management - List Manipulation - B** | | | |
|  | | R | Base Requirements |
|  | | R | All writable list properties in the IUT support list manipulation |
|  | | | |
| **Device Management - Text Message - A** | | | |
|  | | R | Base Requirements |
|  | | C1 | Supports initiation of ConfirmedTextMessage |
|  | | C1 | Supports initiation of UnconfirmedTextMessage |
|  | | C2 | Initiates text messages with no Message Class |
|  | | C2 | Initiates text messages with an Unsigned Message Class |
|  | | C2 | Initiates text messages with a CharacterString Message Class |
| 1 At least one of these options is required in order to claim conformance to this BIBB.  2 At least one of these options is required in order to claim conformance to this BIBB. | | | |
| **Device Management - Text Message - B** | | | |
|  | | R | Base Requirements |
|  | | R | Supports execution of ConfirmedTextMessage |
|  | | R | Supports execution of UnconfirmedTextMessage |
|  | | R | Executes text messages with no Message Class |
|  | | R | Executes text messages with an Unsigned Message Class |
|  | | R | Executes text messages with a CharacterString Message Class |
|  | | | |
| **Device Management - Virtual Terminal - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Device Management - Virtual Terminal - B** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Device Management - Subordinate Proxy - View and Modify - A** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Device Management - Subordinate Proxy - B** | | | |
|  | | R | Base Requirements |
|  | | O | Supports automatic subordinate address binding |
|  | | | |
| **Device Management - Dynamic Device Assignment - A** | | | |
|  | R | | Base Requirements |
|  | R | | Can Configure Device object instance number using the You-Are service |
|  | R | | Can Configure MAC address using the You-Are service |
|  | R | | Can Configure both Device object instance number and MAC address using the You-Are service |
|  | | | |
| **Device Management - Dynamic Device Assignment - B** | | | |
|  | R | | Base Requirements |
|  | R | | Has configurable Device object instance number using the You-Are service |
|  | O | | Has configurable MAC address using the You-Are service |
|  | | | |
| **Device Management - Lighting Output Management - A** | | | |
|  | | R | Base Requirements |
|  | | R1 | Supports DM-OCD-A |
| 1 Object creation and deletion of Lighting Output, Binary Lighting Output, and Channel objects is required. | | | |

# Data Link Layer

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Data Link Layer - MS/TP - Manager Node** | | |
|  | R | Base Requirements |
|  | C1 | Supports writable Max\_Manager property |
|  | C1 | Supports read only Max\_Manager property |
|  | C2 | Contains configurable Max\_Info\_Frames property |
|  | C2 | Contains non-configurable Max\_Info\_Frames property |
|  | O | Is a BACnet router |
|  | C3,4 | Supports extended MS/TP frames (over 501 octets) |
|  | C5 | Supports the Network Port object |
|  | O6 | Supports configurable Out\_Of\_Service property |
|  | C7 | Supports hierarchical Network Port objects |
|  | C7 | Supports Non-hierarchical Network Port objects |
|  | C6,8 | Supports writable Network\_Number property |
|  | O6 | Supports the Routing\_Table property |
|  | O6 | Supports the Network Port object Command property |
|  | O6,9 | Supports the DISCARD\_CHANGES command |
|  | O6,9 | Supports the RESTART\_SUBORDINATE\_DISCOVERY command |
|  | O6,9 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O6,9 | Supports the RESTART\_PORT command |
|  | O9,10 | Supports the VALIDATE\_CHANGES command |
| 1 Exactly one of these options is required in order to claim conformance to this BIBB.  2 Exactly one of these options is required in order to claim conformance to this BIBB.  3 Protocol\_Revision 16 or higher must be claimed.  4 Required if the device is a router and claims Protocol\_Revision 16 or higher.  5 Required for devices which claim Protocol\_Revision 17 or higher.  6 Protocol\_Revision 17 or higher must be claimed.  7 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  8 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  9 At least one of these options is required if the Network Port object Command property is supported.  10 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - MS/TP - Subordinate Node** | | |
|  | R | Base Requirements |
|  | C2 | Supports the Network Port object |
|  | O1 | Supports extended MS/TP frames (over 501 octets) |
|  | O3 | Supports configurable Out\_Of\_Service property |
|  | C4 | Supports hierarchical Network Port objects |
|  | C4 | Supports Non-hierarchical Network Port objects |
|  | O3 | Supports the Network Port object Command property |
|  | O3,5 | Supports the DISCARD\_CHANGES command |
|  | O3,5 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O3,5 | Supports the RESTART\_PORT command |
|  | O5,6 | Supports the VALIDATE\_CHANGES command |
| 1 Protocol\_Revision 16 or higher must be claimed.  2 Required if the IUT claims Protocol\_Revision 17 or higher.  3 Protocol\_Revision 17 or higher must be claimed.  4 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  5 At least one of these options is required if the Network Port object Command property is supported.  6 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - IPv4** | | |
|  | R | Base Requirements |
|  | C1 | Is able to operate in Normal mode |
|  | C1 | Is able to operate in Foreign mode |
|  | C1 | Is able to operate in BBMD mode |
|  | C2 | Supports the Network Port object |
|  | O | Is able to initiate broadcast messages |
|  | O | Supports Network Port objects and DHCP |
|  | O | Supports Network Address Translation in BBMD mode |
|  | O3 | Supports configurable Out\_Of\_Service property |
|  | C4 | Supports hierarchical Network Port objects |
|  | C4 | Supports Non-hierarchical Network Port objects |
|  | C3,5 | Supports writable Network\_Number property |
|  | O3 | Supports the Routing\_Table property |
|  | O3 | Supports the Network Port Object Command property |
|  | O3,6 | Supports the DISCARD\_CHANGES command |
|  | O3,6 | Supports the RENEW\_FD\_REGISTRATION command |
|  | O3,6 | Supports the RENEW\_DHCP command |
|  | O3,6 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O3,6 | Supports the RESTART\_PORT command |
|  | O6,7 | Supports the VALIDATE\_CHANGES command |
| 1 Either BBMD or both Normal and Foreign modes are required.  2 This option is required if the IUT claims Protocol\_Revision 17 or higher.  3 Protocol\_Revision 17 or higher must be claimed.  4 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  5 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  6 At least one of these options is required if the Network Port object Command property is supported.  7 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - ZigBee** | | |
|  | R | Base Requirements |
|  | C1 | Supports the Network Port object |
|  | O2 | Supports configurable Out\_Of\_Service property |
|  | C3 | Supports hierarchical Network Port objects |
|  | C3 | Supports Non-hierarchical Network Port objects |
|  | C2,4 | Supports writable Network\_Number property |
|  | O | Supports the Routing\_Table property |
|  | O | Supports the Network Port Object Command property |
|  | O2,5 | Supports the DISCARD\_CHANGES command |
|  | O2,5 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O2,5 | Supports the RESTART\_PORT command |
|  | O5,6 | Supports the VALIDATE\_CHANGES command |
| 1 Required if the IUT claims Protocol\_Revision 17 or higher.  2 Protocol\_Revision 17 or higher must be claimed.  3 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  4 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  5 At least one of these options is required if the Network Port object Command property is supported.  6 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - Ethernet** | | |
|  | R | Base Requirements |
|  | C1 | Supports the Network Port object |
|  | O2 | Supports configurable Out\_Of\_Service property |
|  | C3 | Supports hierarchical Network Port objects |
|  | C3 | Supports Non-hierarchical Network Port objects |
|  | C2,4 | Supports writable Network\_Number property |
|  | O | Supports the Routing\_Table property |
|  | O | Supports the Network Port Object Command property |
|  | O2,5 | Supports the DISCARD\_CHANGES command |
|  | O2,5 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O2,5 | Supports the RESTART\_PORT command |
|  | O5,6 | Supports the VALIDATE\_CHANGES command |
| 1 Required if the IUT claims Protocol\_Revision 17 or higher.  2 Protocol\_Revision 17 or higher must be claimed.  3 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  4 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  5 At least one of these options is required if the Network Port object Command property is supported.  6 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - ARCNET** | | |
|  | R | Base Requirements |
|  | C1 | Supports the Network Port object |
|  | O2 | Supports configurable Out\_Of\_Service property |
|  | C3 | Supports hierarchical Network Port objects |
|  | C3 | Supports Non-hierarchical Network Port objects |
|  | C2,4 | Supports writable Network\_Number property |
|  | O | Supports the Routing\_Table property |
|  | O | Supports the Network Port Object Command property |
|  | O2,5 | Supports the DISCARD\_CHANGES command |
|  | O2,5 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O2,5 | Supports the RESTART\_PORT command |
|  | O5,6 | Supports the VALIDATE\_CHANGES command |
| 1 Required if the IUT claims Protocol\_Revision 17 or higher.  2 Protocol\_Revision 17 or higher must be claimed.  3 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  4 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  5 At least one of these options is required if the Network Port object Command property is supported.  6 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - LonTalk** | | |
|  | R | Base Requirements |
|  | C1 | Supports the Network Port object |
|  | O2 | Supports configurable Out\_Of\_Service property |
|  | C3 | Supports hierarchical Network Port objects |
|  | C3 | Supports Non-hierarchical Network Port objects |
|  | C2,4 | Supports writable Network\_Number property |
|  | O | Supports the Routing\_Table property |
|  | O | Supports the Network Port Object Command property |
|  | O2,5 | Supports the DISCARD\_CHANGES command |
|  | O2,5 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O2,5 | Supports the RESTART\_PORT command |
|  | O5,6 | Supports the VALIDATE\_CHANGES command |
| 1 Required if the IUT claims Protocol\_Revision 17 or higher.  2 Protocol\_Revision 17 or higher must be claimed.  3 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  4 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  5 At least one of these options is required if the Network Port object Command property is supported.  6 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - IPv6** | | |
|  | R | Base Requirements |
|  | C1 | Is able to operate in Normal mode |
|  | C1 | Is able to operate in Foreign mode |
|  | C1 | Is able to operate in BBMD mode |
|  | R | Supports the Network Port object |
|  | O | Supports DHCP |
|  | O | Supports configurable Out\_Of\_Service property |
|  | C2 | Supports hierarchical Network Port objects |
|  | C2 | Supports Non-hierarchical Network Port objects |
|  | C3 | Supports writable Network\_Number property |
|  | O | Supports the Routing\_Table property |
|  | O | Supports the Network Port Object Command property |
|  | O4 | Supports the DISCARD\_CHANGES command |
|  | O4 | Supports the RENEW\_FD\_REGISTRATION command |
|  | O4 | Supports the RENEW\_DHCP command |
|  | O4 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O4 | Supports the RESTART\_PORT command |
|  | O4,5 | Supports the VALIDATE\_CHANGES command |
| 1 Either BBMD or both Normal and Foreign modes are required.  2 At least one of these options is required.  3 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  4 At least one of these options is required if the Network Port object Command property is supported.  5 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - Secure Connect** | | |
|  | R | Base Requirements |
|  | C1 | Is able to operate as a node without a local hub function |
|  | C1 | Is able to operate as a hub |
|  | O | Supports direct connections |
|  | O2 | Is able to accept direct connections |
|  | O2 | Is able to initiate direct connections |
|  | C3 | Supports the Network Port object |
|  | C4 | Contains a Network Port object with a Proprietary Network\_Type |
|  | C5 | Supports DM-TS-B |
|  | C5 | Supports DM-UTC-B |
|  | C5 | Supports Time Synchronization by Some Other Method |
|  | C6 | Supports B/SC over IPv4 |
|  | C6 | Supports B/SC over IPv6 |
|  | O7 | Supports configurable Out\_Of\_Service property |
|  | C7,8 | Supports hierarchical Network Port objects |
|  | C7,8 | Supports Non-hierarchical Network Port objects |
|  | C7,10 | Supports writable Network\_Number property |
|  | O7 | Supports the Routing\_Table property |
|  | O7 | Supports the Network Port Object Command property |
|  | O7,9 | Supports the DISCARD\_CHANGES command |
|  | O7,9 | Supports the RESTART\_PORT command |
|  | O9,11 | Supports the GENERATE\_CSR\_FILE command |
|  | O9,11 | Supports the VALIDATE\_CHANGES command |
| 1 At least one of these options must be supported.  2 At least one of these options must be supported if the device supports direct connections.  3 Required if the IUT claims Protocol\_Revision 24 or higher.  4 Required if the IUT claims a Protocol\_Revision greater than 16 and less than 24.  5 At least one of these options must be supported.  6 At least one of these options must be supported.  7 Protocol\_Revision 17 or higher must be claimed.  8 At least one of these options must be supported.  9 At least one of these options is required if the Network Port object Command property is supported.  10 Support for writable Network\_Number properties is required in routers and other IUTs that need to know the network number in order to operate.  11 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - Virtual Network** | | |
|  | R | Base Requirements |
|  | R | Supports GW-VN-B |
|  | C1 | Supports the Network Port object |
|  | C1,2 | Supports writable Network\_Number property |
|  | O1 | Supports configurable Out\_Of\_Service property |
|  | C1,3 | Supports hierarchical Network Port objects |
|  | C1,3 | Supports Non-hierarchical Network Port objects |
|  | O1 | Supports the Routing\_Table property |
|  | O1 | Supports the Network Port object Command property |
|  | O1,4 | Supports the DISCARD\_CHANGES command |
|  | O1,4 | Supports the RENEW\_FD\_REGISTRATION command |
|  | O1,4 | Supports the RESTART\_SLAVE\_DISCOVERY command |
|  | O1,4 | Supports the RENEW\_DHCP command |
|  | O1,4 | Supports the RESTART\_AUTONEGOTIATION command |
|  | O1,4 | Supports the RESTART\_PORT command |
|  | O4,5 | Supports the GENERATE\_CSR\_FILE command |
|  | O4,5 | Supports the VALIDATE\_CHANGES command |
| 1 Protocol\_Revision 17 or higher must be claimed.  2 The Network\_Number property shall be present and writable.  3 At least one of these options is required.  4 At least one of these options is required if the Network Port object Command property is supported.  5 Protocol\_Revision 24 or higher must be claimed. | | |
| **Data Link Layer - B/IP PAD (Annex H)** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this functionality | | |
| **Data Link Layer - Proprietary** | | |
|  | R | Base Requirements |
|  | C1 | Supports the Network Port object |
|  | O2 | Supports configurable Out\_Of\_Service property |
|  | C3 | Supports hierarchical Network Port objects |
|  | C3 | Supports Non-hierarchical Network Port objects |
|  | O2 | Supports the Network Port object Command property |
|  | O2,4 | Supports the DISCARD\_CHANGES command |
|  | O2,4 | Supports the RESTART\_PORT command |
|  | O4,5 | Supports the VALIDATE\_CHANGES command |
| 1 Required if the IUT claims Protocol\_Revision 17 or higher.  2 Protocol\_Revision 17 or higher must be claimed.  3 At least one of these options is required if the IUT claims Protocol\_Revision 17 or higher.  4 At least one of these options is required if the Network Port object Command property is supported.  5 Protocol\_Revision 24 or higher must be claimed. | | |

# Network Management

| **Support** | **Listing** | | **Option** |
| --- | --- | --- | --- |
| **Network Management - Routing** | | | |
|  | R | | Base Requirements |
|  | C1 | | Routes packets between physical BACnet LANs |
|  | C1 | | Routes packets between a physical LAN and one or more virtual LANs |
| 1 At least one of these options must be supported. | | | |
| **Network Management - Router Configuration - B** | | | |
|  | R | | Base Requirements |
|  | R | | Supports Routing |
|  | C1 | | Supports DS-WP-B |
| 1 Required if the device claims protocol revision 17 or higher. | | | |
| **Network Management - Connection Establishment - A** | | | |
|  | R | | Base Requirements |
|  | | | |
| **Network Management - Connection Establishment - B** | | | |
|  | R | | Base Requirements |
|  | | | |
| **Network Management - Router Configuration - A** | | | |
|  | R | | Base Requirements |
|  | C1 | | Is able to configure Network Port objects |
| 1This option is required if the IUT claims Protocol\_Revision 17 or higher. | | | |
| **Network Management - BBMD Configuration - A** | | | |
|  | R | | Base Requirements |
|  | C1 | | Is able to configure Network Port objects |
| 1 This option is required if the IUT claims Protocol\_Revision 17 or higher. | | | |
| **Network Management - BBMD Configuration - B** | | | |
|  | R | | Base Requirements |
|  | R | | Supports Registration by Foreign Devices |
|  | | | |
| **Network Management - Foreign Device Registration - A** | | | |
|  | R | | Base Requirements |
|  | | | |
| **Network Management - Secure Connect Hub - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Network Management - Secure Connect Direct Connect - A** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Network Management - Secure Connect Direct Connect - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Network Management - Communications Configuration - A** | | | |
|  | | R1 | Base Requirements |
| 1 Protocol\_Revision 24 or higher must be claimed. | | | |
| **Network Management - Secure Connect Certificate Management - A** | | | |
|  | | R1 | Base Requirements |
| 1 Protocol\_Revision 24 or higher must be claimed. | | | |

# Gateway

| **Support** | | **Listing** | | **Option** |
| --- | --- | --- | --- | --- |
| **Gateway - Virtual Network - B** | | | | |
|  | | R | | Base Requirements |
|  | | C1 | | Supports Data Link Layer - Virtual Network |
| 1 Required if the device claims Protocol\_Revision 17 or higher. | | | | |
| **Gateway - Embedded Objects - B** | | | | |
|  | | R | | Base Requirements |
|  | O | | Supports command prioritization | |
|  | | | | |

# Network Security BIBBs

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Network Security - Secure Device** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Encrypted Device** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Multi-Application Device** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Device Master Key - A** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Device Master Key - B** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Key Server** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Temporary Key Server** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Secure Router** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Network Security - Security Proxy** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |

# Audit Reporting BIBBs

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Audit Reporting - Logging - A** | | |
|  | R | Base Requirements |
|  | R | Supports matching and combining of audit notifications |
|  | R | Supports hierarchical audit logging |
|  | R | Supports execution of AuditLogQuery |
|  | | |
| **Audit Reporting - Reporter - B** | | |
|  | R | Base Requirements |
|  | R | Supports operation target auditing |
|  | C1 | Supports operation source auditing |
|  | C2 | Generates UnconfirmedAuditNotifications |
|  | C2 | Generates ConfirmedAuditNotifications |
|  | O | Supports Delaying of Audit Notifications |
| 1 Required if the IUT is able to operate as a BACnet client.  2 At least one of these options is required in order to claim conformance to this BIBB. | | |
| **Audit Reporting - Reporter - Simple - B** | | |
|  | R | Base Requirements |
|  | R | Supports operation target auditing |
|  | C1 | Supports operation source auditing |
|  | C2 | Generates UnconfirmedAuditNotifications |
|  | C2 | Generates ConfirmedAuditNotifications |
|  | O | Supports Delaying of Audit Notifications |
| 1 Required if the IUT is able to operate as a BACnet client.  2 At least one of these options is required in order to claim conformance to this BIBB. | | |
| **Audit Reporting - Forwarder - B** | | |
|  | R | Base Requirements |
|  | | |
| **Audit Reporting - View - A** | | |
|  | R | Base Requirements |
|  | C1 | Supports reading Audit Logs using AuditLogQuery |
|  | C1 | Supports reading Audit Logs using ReadRange |
| 1 At least one of these options is required in order to claim conformance to this BIBB. | | |
| **Audit Reporting - Advanced View and Modify - A** | | |
|  | R | Base Requirements |
|  | R | Supports reading Audit Logs using AuditLogQuery |
|  | R | Supports reading Audit Logs using ReadRange |
|  | R | Supports DS-RP-A |
|  | R | Supports DS-WP-A |
|  | R1 | Supports DM-OCD-A |
| 1 Object creation and deletion of Audit Reporter and Audit Log objects is required. | | |

# BACnet Web Services

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **BACnet Web Services Client** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this functionality. | | |
| **BACnet Web Services Server** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this functionality. | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Change** |
| 4.0.0 | 13-Sept-2006 | Carl Neilson | * Changed revision numbering |
| 5.0.final | 7-Jul-2009 | Lori Tribble | * Renamed to final. |
| 6.0.1 | 14-Jul-2010 | Duffy O’Craven | * Added object types and datatypes |
| 9.0.final | 01-Dec-2011 | Duffy O’Craven | * Updated from 9.0.22 to 9.0.final, accepting all change tracking |
| 12.0.final | 02-Aug-2012 | Lori Tribble | * Applied Errata-BTL Test Package 9.0 plus addenda 8/02/2012 (no changes needed) * Accepted Changes and renamed to final. |
| 12.1.1 | 27-Sept-2013 | Lori Tribble | * Applied Addendum 12.0b |
| 12.1.2 | 27-Sept-2013 | Lori Tribble | * Applied Addendum 12.0c |
| 12.1.3 | 30-Sept-2013 | Lori Tribble | * Applied Addendum 12.0d |
| 12.1.4 | 30-Sept-2013 | Lori Tribble | * Applied Addendum 12.0e |
| 12.1.5 | 1-Oct-2013 | Lori Tribble | * Applied Addendum 12.0f |
| 12.1.6 | 1-Oct-2013 | Lori Tribble | * Applied Addendum 12.0g |
| 12.1.7 | 1-Oct-2013 | Lori Tribble | * Applied Errata dated 9/30/2013 |
| 14.0.1 | 02-Sep-2014 | Duffy O’Craven | * Applied Add-BTL Test Package 12.1-a * Applied Add-BTL Test Package 12.1-b |
| 14.0.2 | 03-Sep-2014 | Duffy O’Craven | * Applied Add-BTL Test Package 12.1-c * Applied Add-BTL Test Package 12.1-d |
| 14.0.3 | 08-Sep-2014 | Duffy O’Craven | * Applied Errata moving AE-INFO-A and AE-INFO-B within test plan to locate them just after AE-ESUM-B, and renumber existing 5.10 through 5.13 to follow after them |
| 14.0.4 | 29-Oct-2014 | Emily Hayes | * Eliminated intermediate change histories |
| 14.0.5 | 19-Nov-2014 | Duffy O’Craven | * Restored section 5 Alarm and Event Management BIBBs numbering |
| 14.0.final | 31-Oct-2014 | Duffy O’Craven | * Updated to final revision |
| 15.0.05 | 24-Aug-2017 | Lori Tribble | * Applied Addenda 14.0b-j plus errata |
| 15.0.07 | 16-Sep-2017 | Lori Tribble | * Applied additional errata. |
| 15.0.08 | 25-Sep-2017 | Lori Tribble | * Removed Global Group ‘Supports Reliability Evaluation’ |
| 15.0.final | 25-Sep-2017 | Lori Tribble | * Accepted all changes and marked as final |
| 15.1.1 | 27-Feb-2018 | Lori Tribble | * Applied Addenda a,b and c. |
| 15.1.2 | 5-Apr-2018 | Lori Tribble | * Applied Addenda d and errata |
| 15.1.3 | 5-Apr-2018 | Lori Tribble | * Accepted all changes. |
| 15.1.4 | 17-Apr-2018 | Lori Tribble | * Applied additional Errata |
| 15.1.5 | 7-May-2018 | Lori Tribble | * Applied additional Errata |
| 15.1.6 | 10 May 2018 | Lori Tribble | * Found more numbering issues. Applied as Errata. |
| 15.1.final | 1 June 2018 | Lori Tribble | * Renamed to final |
| 15.2.1 | 1-Aug-2018 | Lori Tribble | * Started our 15.2 version, applied errata from 15.1 |
| 15.2.2 | 13-Oct-2018 | Lori Tribble | * Applied addenda e, f and g. |
| 15.2.4 | 11-Nov-2018 | Lori Tribble | * Final Cleanup before 15.2 release. |
| 16.0.1 | 19-Aug-2019 | Lori Tribble | * Converted to docx and additional cleanup. |
| 16.0.2 | 19-Aug-2019 | Lori Tribble | * Applied addenda h. |
| 16.0.3 | 26-Aug-2019 | Lori Tribble | * Applied addenda i |
| 16.0.4 | 27-Aug-2019 | Lori Tribble | * Applied addenda j |
| 16.0.5 | 27-Aug-2019 | Lori Tribble | * Applied addenda k |
| 16.0.6 | 28-Aug-2019 | Lori Tribble | * Applied addenda l |
| 16.0.7 | 29-Aug-2019 | Lori Tribble | * Applied addenda m |
| 16.0.8 | 29-Aug-2019 | Lori Tribble | * Applied addenda n (no changes) |
| 16.0.9 | 30-Aug-2019 | Lori Tribble | * Applied addenda o |
| 16.0.10 | 30-Aug-2019 | Lori Tribble | * Applied addenda p |
| 16.0.11 | 30-Aug-2019 | Lori Tribble | * Applied addenda r (no changes) |
| 16.0.12 | 30-Aug-2019 | Lori Tribble | * Applied addenda s |
| 16.0.13 | 30-Aug-2019 | Lori Tribble | * Applied Errata |
| 16.0.14 | 25-Sep-2019 | Lori Tribble | * Accepted changes. Minor format changes. Various errata applied. |
| 16.0.final | 25-Sep-2019 | Lori Tribble | * Renamed to Final |
| 16.0.final.v2 | 5-Nov-2019 | Lori Tribble | * Added Ipv6 entry to checklist and test plan. |
| 16.1 | 10-Dec-2019 | Lori Tribble | * Applied Errata, Added PR21 and 22 items, renamed to 16.1. |
| 18.0\_v1 | October 4 2020 | Lori Tribble | * Updated version to 18.0. * Applied Addenda ai * Applied addenda aj * Applied addenda bf * Applied addenda bg * Applied addenda bj * Applied addenda fix2 * Applied addenda fix1 * Applied addenda al * Applied addenda aq * Applied addenda as * Applied addenda ay * Applied addenda misc4 |
| 18.0\_v3 | 11-Oct-2020 | Lori Tribble | * Applied errata |
| 18.0\_v4 | 13-Oct-2020 | Lori Tribble | * Just updated to v4 and corrected date at beginning. |
| 18.0\_v5 | 17-Oct-2020 | Lori Tribble | * Applied errata LJT - miscellaneous formatting, reordering sections to match test plan. |
| 18.0\_v6 | 18-Oct-2020 | Lori Tribble | * Updated version and date to match other documents. |
| 18.0\_v7 | 28-Oct-2020 | Lori Tribble | * Minor errata changes after voting review. |
| 18.0\_v8 | 29-Oct-2020 | Emily Hayes | * Additional Minor errata changes after voting review. |
| 18.1\_v1 | 3-Jan-2021 | Lori Tribble | * Creation of 18.1 document from 18.0\_v8. |
| 18.1\_v2 | 21-Jan-2021 | Lori Tribble | * Additional Errata |
| 18.1\_v3 | 24-Jan-2021 | Lori Tribble | * Applied Add fix1 |
| 18.1\_v4 | 24-Jan-2021 | Lori Tribble | * Moved Interim Tests ready for TP 18. |
| 18.1\_v6 | 13-Feb-2021 | Lori Tribble | * Final vote comments applied. |
| 20.0 v1 | 18-Nov-2021 | Lori Tribble | * Applied Fix addenda to 18.1\_v6 |
| 20.0 v2 | 19-Nov-2021 | Lori Tribble | * Applied addenda alm. |
| 20.0 v3 | 21-Nov-2021 | Lori Tribble | * Applied addenda bc |
| 20.0 v4 | 21-Nov-2021 | Lori Tribble | * Applied addenda bi |
| 20.0 v5 | 11-Dec-2021 | Lori Tribble | * Applied addenda bk - no changes |
| 20.0 v6 | 11-Dec-2021 | Lori Tribble | * Applied addenda cov |
| 20.0 v7 | 12-Dec-2021 | Lori Tribble | * Applied addenda misc1 |
| 20.0 v8 | 12-Dec-2021 | Lori Tribble | * Applied addenda log |
| 20.0 v9 | 15-Dec-2021 | Lori Tribble | * Applied addenda PR13-PR18 |
| 20.0 v10 | 15-Dec-2021 | Lori Tribble | * Applied addenda bd |
| 20.0 v11 | 16-Dec-2021 | Lori Tribble | * Applied Errata (Part 1) |
| 20.0 v12 | 18-Dec-2021 | Carl Neilson | * Applied 18.1.3 changes |
| 20.0 v13 | 20-Dec-2021 | Lori Tribble | * Applied Errata (part 2) |
| 20.0 v14 | 21-Dec-2021 | Carl Neilson | * Fixed up CheckList vs Test Plan issues |
| 20.0 v15 | 2-Jan-2022 | Lori Tribble | * Applied comments from voters |
| 20.0 v16 | 14-Jan-2022 | Carl Neilson | * Errata |
| 20.0 final | 17-Jan-2022 | Emily Hayes | * Accepted all changes. Renamed to final |
| 23.0 v1 | 25-Oct-2022 | Lori Tribble | * Applied Vote1 addenda (af, bc, bl, br) |
| 23.0 v2 | 1-Nov-2022 | Lori Tribble | * Applied Vote2 addenda (bq, bs, bt, bu, bz) |
| 23.0 v3 | 1-Nov-2022 | Lori Tribble | * Applied Vote3 addenda (cd, improvements1) |
| 23.0 v4 | 4-Nov-2022 | Lori Tribble | * Applied Vote4 addenda (cr1, cr2) |
| 23.0 v5 | 11-Nov-2022 | Lori Tribble | * Applied Errata as of 11/11/2022 |
| 23.0 v6 | 14-Nov-2022 | Lori Tribble | * Typo in Ipv6 entry, added missing entries new BIBBs under Network Management. |
| 23.0 v7 |  | Carl Neilson | * Validation process |
| 23.0 v8 |  | Carl Neilson | * Validation process before formal vote. |
| 23.0 v9 | 21-Dec-2022 | Lori Tribble | * Applied comments after formal vote. |
| 23.1 v3 | 23-May-2023 | Lori Tribble | * Applied addenda cr1, fix, errata |
| 23.1 v4 | 23-May-2023 | Michael Osborne | * Removed NM-BBMDC-B from IPv6 section |
| 23.1 v5 | 14-Jun-2023 | Lori Tribble | * Fixed this table and version on cover page |
| 23.2 | 21-Dec-2023 | Michael Osborne | * 23.2 updates the Test Package to 135.1-2023. No change to the Checklist. |
| 23.3 | 30-Dec-23 | Michael Osborne | * Applied 23.1 Fix Addendum. No change to the Checklist. |
| 26.0 v1 | 7-Oct-24 | Lori Tribble | * Initial changes to checklist based on 23.3 checklist. Fix1, fix2, fix3, fix4, and epics. |
| 26.0 v2 | 9-Oct-2024 | Lori Tribble | * Cr1 changes |
| 26.0 v3 | 17-Oct-2024 | Lori Tribble | * Applied bq, br, bv, ca, cc, cf to checklist |
| 26.0 v4 | 21-Oct-2024 | Lori Tribble | * Applied imp1, imp2 |
| 26.0 v5 | 23-Oct-2024 | Lori Tribble | * Applied imp3, imp4 |
| 26.0 v7 | 30-Oct-2024 | Lori Tribble | * Applied errata found |
| 26.0 a | 20-Aug-2025 | Lori Tribble | * Updated to reference 135.1-2025 (i.e. name changes) |
| 26.1 v1 | 20-Aug-2025 | Lori Tribble | * No Changes from 26.0 a |
| 26.1 v4 | 25-Sep-2025 | Lori Tribble | * Applied Add CHK1 (note there is no v2 - 3 of this document). |
| 26.1 v5 | 25-Sep-2025 | Lori Tribble | * Applied Add cr1 |
| 26.1 v6 | 26-Sep-2025 | Lori Tribble | * Applied Add imp1 |
| 26.1 v7 | 22-Oct-2025 | Michael Osborne | * Final tweaks |
| 26.1 v8 | 8-Nov-2025 | Michael Osborne | * Final, post-vote |
| 26.1 final | 19-Nov-2025 | Emily Hayes | * Prep for publication |