****

**BACnet** **TESTING LABORATORIES**

**FUNCTIONALITY CHECKLIST**

**Revision 16.1.2**

**Revised April 9, 2020**

# 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.

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.

## 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 Revision |  |
| BACnet Device Profile |  |
| BACnet Firmware Revision |  |
| BACnet Application Software Version |  |
|  |  |
| Remarks |  |

# 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 |
|  | N | Uses static router address configuration |
|  | BTL-C2 | Supports DM-DDB-B |
|  | C2, 3 | Supports DM-DOB-B |
|  | O | Initiates Confirmed Requests |
| 1 At least one of these options must be supported if the device is capable of transmitting any unicast service requests besides COV notifications, including unicast service requests containing remote or global broadcasts.  2 Required unless the device is an MS/TP slave device.  3 Required if the device implements protocol revision 5 or higher. | | |
| **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 writable Out\_Of\_Service property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Analog Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Analog Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Averaging Object** | | |
|  | R | Base Requirements |
|  | | |
| **Binary Input Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports writable Polarity property |
|  | O | Supports change of state tracking |
|  | O | Supports elapsed active time tracking |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Binary Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Binary Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit 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 |
|  | | |
| **Device Object** | | |
| X | R | Base Requirements |
|  | C1 | Supports Database\_Revision property |
|  | BTL-C2 | Supports Time\_Synchronization\_Recipients |
|  | BTL-C2 | Supports UTC\_Time\_Synchronization\_Recipients |
|  | O | Contains a writable Local\_Date property |
|  | O | Contains a writable Local\_Time property |
| 1 Required if the device implements protocol revision 2 or higher.  2 The BTL requires that if the device implements protocol revision 7 or higher, then either both, or none of Time\_Synchronization\_Recipients or UTC\_Time\_Synchronization\_Recipients is supported. | | |
| **Event Enrollment Object** | | |
|  | R | Base Requirements |
|  | R | Supports AE-N-I-B |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Group Object** | | |
|  | R | Base Requirements |
|  | | |
| **Loop Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Contains a non-empty Setpoint\_Reference list |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Multi-state Input Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | S | Supports State\_Text |
|  | O | Supports resizable State\_Text property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Multi-state Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports writable Out\_Of\_Service property |
|  | S | Supports State\_Text |
|  | O | Supports resizable State\_Text property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Multi-state Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | S | Supports State\_Text |
|  | O | Supports command prioritization |
|  | O | Supports resizable State\_Text property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit 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 |
| 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. | | |
| **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 |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
| 1 You must support one of the listed scheduling BIBBs if your device contains a schedule object | | |
| **Trend Log Object** | | |
|  | R | Base Requirements |
|  | BTL-R | Supports T-VMT-I-B |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
| 1 At least one of these options is required if the IUT supports theEvent Log object type. | | |
| **Trend Log Multiple Object** | | |
|  | R | Base Requirements |
|  | R | Supports T-VMMV-I-B |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Bitstring Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **CharacterString Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Date Pattern Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Date Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **DateTime Pattern Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **DateTime Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Integer Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Large Analog Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **OctetString Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Positive Integer Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Time Pattern Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Time Value Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports command prioritization |
|  | O | Contains a writable Present\_Value property |
|  | O | Contains a writable Relinquish\_Default property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Global Group Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 |
| 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. | | |
| **Accumulator Object** | | |
|  | R | Base Requirements |
|  | O | Supports Prescale property |
|  | O | Supports Logging\_Record property |
|  | O | Supports writable Out\_Of\_Service property |
|  | O | Supports writable Value\_Set property |
|  | O | Supports writable Value\_Before\_Change property |
|  | | |
| **Program Object** | | |
|  | R | Base Requirements |
|  | | |
| **Life Safety Point Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports writable Member\_Of property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Life Safety Zone Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports writable Member\_Of property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Pulse Converter Object** | | |
|  | R | Base Requirements |
|  | O | Supports writable Out\_Of\_Service property |
|  | | |
| **Access Door Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
| 1 If Secured\_Status is supported, this is required. | | |
| **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 |
|  | | |
| **Access Point Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable 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 |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Access Zone Object** | | |
|  | R | Base Requirements |
|  | S | Supports Writable Out\_Of\_Service property |
|  | O | Supports Occupancy\_Count property |
|  | O | Supports Credentials\_In\_Zone property |
|  | O | Supports Passback\_Mode property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Access User Object** | | |
|  | R | Base Requirements |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Access Rights Object** | | |
|  | R | Base Requirements |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit 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 |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Credential Data Input Object** | | |
|  | R | Base Requirements |
|  | O | Supports writable Out\_Of\_Service property |
|  | O | Contains an object with Reliability\_Evaluation\_Inhibit 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 writable Out\_Of\_Service Property |
|  | O | Supports 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. | | |
| **Alert Enrollment Object** | | |
|  | R | Base requirements |
|  | R | Supports AE-N-I-B |
|  | | |
| **Channel Object** | | |
|  | R | Base Requirements |
|  | S | Supports writable Out\_Of\_Service property |
|  | O | Supports an object with Reliability\_Evaluation\_Inhibit 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 |
|  | | |
| **Lighting Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | R | Supports all BACnetLightingOperations |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Binary Lighting Output Object** | | |
|  | R | Base Requirements |
|  | R | Supports command prioritization |
|  | S | Supports writable 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 | Contains an object with Reliability\_Evaluation\_Inhibit property |
|  | | |
| **Network Port Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 17 or higher must be claimed | | |
| **Timer Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 17 or higher must be claimed | | |
| **Elevator Group Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 18 or higher must be claimed | | |
| **Lift Object** | | |
|  | R1,2 | Base Requirements |
| 1Contact BTL for interim tests for this object.  2Protocol\_Revision 18 or higher must be claimed | | |
| **Escalator Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 18 or higher must be claimed | | |
| **File Object** | | |
|  | R | Base Requirements |
|  | C1 | Supports DM-BR-B |
|  | C1 | Supports a record-based File object for a purpose other than Backup and Restore |
|  | C1 | Supports a stream-based File object for a purpose other than Backup and Restore |
|  | O | Contains a writable stream-based File for a purpose other than Backup and Restore |
| 1 At least one of these options is required if the IUT supports the File object type. | | |
| **Staging Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 20 or higher must be claimed. | | |
| **Audit Reporter Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 20 or higher must be claimed. | | |
| **Audit Log Object** | | |
|  | R1,2 | Base Requirements |
| 1 Contact BTL for interim tests for this object.  2 Protocol\_Revision 20 or higher must be claimed. | | |

# 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 |
|  | | O | | Can read NULL property values |
|  | | O | | Can read BOOLEAN property values |
|  | | O | | Can read Enumerated property values |
|  | | O | | Can read INTEGER property values |
|  | | O | | Can read Unsigned property values |
|  | | O | | Can read REAL property values |
|  | | O | | Can read Double property values |
|  | | O | | Can read Time property values |
|  | | O | | Can read Date property values |
|  | | O | | Can read Character String property values |
|  | | O | | Can read Octet String property values |
|  | | O | | Can read Bit String property values |
|  | | O | | Can read BACnetObjectIdentifier property values |
|  | | O | | Can read constructed property values |
|  | | O | | 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 | | | | |
| **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 |
|  | | O | | Can read NULL property values |
|  | | O | | Can read BOOLEAN property values |
|  | | O | | Can read Enumerated property values |
|  | | O | | Can read INTEGER property values |
|  | | O | | Can read Unsigned property values |
|  | | O | | Can read REAL property values |
|  | | O | | Can read Double property values |
|  | | O | | Can read Time property values |
|  | | O | | Can read Date property values |
|  | | O | | Can read Character String property values |
|  | | O | | Can read Octet String property values |
|  | | O | | Can read Bit String property values |
|  | | O | | Can read BACnetObjectIdentifier property values |
|  | | O | | Can read constructed property values |
|  | | O | | 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 - 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 |
|  | | C2,3 | | Contains writable list properties |
|  | | O | | Contains commandable properties |
|  | | C2 | | 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 |
|  | | O | | Contains writable BOOLEAN properties |
|  | | O | | Contains writable Enumerated properties |
|  | | O | | Contains writable INTEGER properties |
|  | | O | | Contains writable Unsigned properties |
|  | | O | | Contains writable REAL properties |
|  | | O | | Contains writable Double properties |
|  | | O | | Contains writable Time properties |
|  | | O | | Contains writable Date properties |
|  | | O | | Contains writable Character String properties |
|  | | O | | Contains writable Octet String properties |
|  | | O | | Contains writable Bit String properties |
|  | | O | | Contains writable BACnetObjectIdentifier properties |
|  | | O | | Contains writable properties with non-basic data types |
|  | | O | | 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. | | | | |
| **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 |
|  | | C2,4,5 | | Can subscribe for COV from Staging objects |
|  | | 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.  4 Contact BTL for interim tests for this object.  5 Protocol\_Revision 20 or higher must be claimed. | | | | |
| **Data Sharing - Change Of Value - B** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports Lifetimes up to 8 hours in duration |
|  | | BTL-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 |
|  | | C1,2,3 | | Supports COV for Staging objects |
|  | | 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.  2 Contact BTL for interim tests for this object.  3 Protocol\_Revision 20 or higher must be claimed. | | | | |
| **Data Sharing - View - A** | | | | |
|  | | R | | Base Requirements |
|  | | R | | Supports DS-RP-A |
|  | | BTL-R1 | | Supports Primitive Value objects |
| 1 Required if the device implements protocol revision 10 or higher | | | | |
| **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 |
|  | | BTL-R1 | | Supports Primitive Value objects |
| 1 Required if the device implements protocol revision 10 or higher | | | | |
| **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 Unsigned values | |
|  | | C1 | Accepts UnconfirmedCOVNotifications containing Integer 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 | |
|  | | O3 | Can subscribe to NULL property values | |
|  | | O3 | Can subscribe to BOOLEAN property values | |
|  | | O3 | Can subscribe to Enumerated property values | |
|  | | O3 | Can subscribe to INTEGER property values | |
|  | | O3 | Can subscribe to Unsigned property values | |
|  | | O3 | Can subscribe to REAL property values | |
|  | | O3 | Can subscribe to Double property values | |
|  | | O3 | Can subscribe to Time property values | |
|  | | O3 | Can subscribe to Date property values | |
|  | | O3 | Can subscribe to CharacterString property values | |
|  | | O3 | Can subscribe to OctetString property values | |
|  | | O3 | Can subscribe to BitString property values | |
|  | | O3 | Can subscribe to BACnetObjectIdentifier property values | |
|  | | O3 | Can subscribe to constructed property values | |
|  | | O3 | Can subscribe to proprietary property values of basic data types | |
|  | | O | Can cancel 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 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 COVP Lifetimes up to 8 hours in duration | |
|  | | R | Supports COVP for Status\_Flags changes | |
|  | | C1 | Supports COVP for non-array property | |
|  | | C1 | Supports COVP for array element | |
|  | | C1 | Supports COVP for the size of an array | |
|  | | C1 | Supports COVP for whole array | |
|  | | O | Supports COVP for list property | |
|  | | C2 | Supports COVP for NULL property values | |
|  | | C2 | Supports COVP for BOOLEAN property values | |
|  | | C2 | Supports COVP for Enumerated property values | |
|  | | C2 | Supports COVP for INTEGER property values | |
|  | | C2 | Supports COVP for Unsigned property values | |
|  | | C2 | Supports COVP for REAL property values | |
|  | | C2 | Supports COVP for Double property values | |
|  | | C2 | Supports COVP for Time property values | |
|  | | C2 | Supports COVP for Date property values | |
|  | | C2 | Supports COVP for CharacterString property values | |
|  | | C2 | Supports COVP for OctetString property values | |
|  | | C2 | Supports COVP for BitString property values | |
|  | | C2 | Supports COVP for BACnetObjectIdentifier property values | |
|  | | C2 | Supports COVP for constructed 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 - WriteGroup - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **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** | | | | |
|  | | R1,2 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB.  2 Protocol\_Revision 17 or higher must be claimed. | | | | |
| **Data Sharing - Change Of Value Multiple - A** | | | | |
|  | | R1,2 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB.  2 Protocol\_Revision 18 or higher must be claimed. | | | | |
| **Data Sharing - Change Of Value Multiple - B** | | | | |
|  | | R1,2 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB.  2 Protocol\_Revision 18 or higher must be claimed. | | | | |
| **Data Sharing - Life Safety View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Life Safety Advanced View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Life Safety Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Life Safety Advanced Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Advanced View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Advanced Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control User Configuration - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control User Configuration - B** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Site Configuration - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Site Configuration - B** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Access Door - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Access Door - B** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Credential Data Input - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Access Control Credential Data Input - B** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Output - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Output Status - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Advanced Lighting Output - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Output - B** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Binary Lighting Output - B** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Output Management - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Advanced View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Lighting Advanced Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Elevator View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Elevator Advanced View - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Elevator Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Data Sharing - Elevator Advanced Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |

# 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 |
|  | | R1 | Processes DOUBLE\_OUT\_OF\_RANGE notifications |
|  | | R1 | Processes SIGNED\_OUT\_OF\_RANGE notifications |
|  | | R1 | Processes UNSIGNED\_OUT\_OF\_RANGE notifications |
|  | | R1 | Processes CHANGE\_OF\_CHARACTERSTRING notifications |
|  | | R2 | Processes CHANGE\_OF\_STATUS\_FLAGS notifications |
|  | | R3 | Processes CHANGE\_OF\_RELIABILITY notifications |
|  | | R4 | Processes CHANGE\_OF\_DISCRETE\_VALUE notifications |
|  | | R5 | Processes CHANGE\_OF\_TIMER notifications |
|  | | R4 | 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 implements protocol revision 10 or higher.  2 Required if the device implements protocol revision 11 or higher.  3 Required if the device implements protocol revision 13 or higher.  4 Required if the device implements protocol revision 16 or higher.  5 Required if the device implements 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 |
|  | | C4 | 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 | Implements the CHANGE\_OF\_RELIABILITY - NONE |
|  | | C3 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_CHARACTERSTRING algorithm |
|  | | C3 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_EXTENDED algorithm |
|  | | C3 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LIFE\_SAFETY algorithm |
|  | | C3 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATE algorithm |
|  | | C3 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATUS\_FLAGS algorithm |
|  | | C3,5,8 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LISTED algorithm |
|  | | C3 | Supports CHANGE\_OF\_RELIABILITY in the Event Enrollment Object |
|  | | C3,5 | Implements the CHANGE\_OF\_LIFE\_SAFETY algorithm |
|  | | C3,5 | Implements the ACCESS\_EVENT algorithm |
|  | | C3, 6 | Implements the CHANGE\_OF\_DISCRETE\_VALUE algorithm |
|  | | C3,5,7 | Implements the CHANGE\_OF\_TIMER algorithm |
|  | | C3, 6 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_OUT\_OF\_RANGE algorithm |
| 1 Required if EventNotifications with service parameter AckRequired = True can be issued.  2 At least one of these options must be supported to claim support for this BIBB.  3 At least one of these options must be supported to claim support for 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 Contact BTL for interim tests for this algorithm.  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. | | | |
| **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 | Implements the CHANGE\_OF\_RELIABILITY - NONE |
|  | | C1 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_CHARACTERSTRING algorithm |
|  | | C1 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_EXTENDED algorithm |
|  | | C1 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LIFE\_SAFETY algorithm |
|  | | C1 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATE algorithm |
|  | | C1 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_STATUS\_FLAGS algorithm |
|  | | C1,2,5 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_LISTED algorithm |
|  | | C1 | Supports CHANGE\_OF\_RELIABILITY in the Event Enrollment object |
|  | | C1,2 | Implements the CHANGE\_OF\_LIFE\_SAFETY algorithm |
|  | | C1,2 | Implements the ACCESS\_EVENT algorithm |
|  | | C1,3 | Implements the CHANGE\_OF\_DISCRETE\_VALUE algorithm |
|  | | C1,2,4 | Implements the CHANGE\_OF\_TIMER algorithm |
|  | | C1, 3 | Implements the CHANGE\_OF\_RELIABILITY - FAULT\_OUT\_OF\_RANGE algorithm |
|  | | C1 | Implements a Proprietary algorithm |
|  | | O | Supports Event\_Message\_Texts property |
| 1 At least one of these options must be supported to claim support for this BIBB. It is recommended that a standard BACnet algorithm be used instead of a proprietary algorithm whenever possible.  2 Contact BTL for interim tests for this algorithm.  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. | | | |
| **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. | | | |
| **Alarm and Event Management - Acknowledge - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Alarm and Event Management - Alarm Summary - A** | | | |
|  | | R1 | Base Requirements |
| 1 This BIBB can be claimed if AE-AS-A is also claimed. | | | |
| **Alarm and Event Management - Alarm Summary - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Alarm and Event Management - Enrollment Summary - A** | | | |
|  | | R1 | Base Requirements |
|  | | O | Generates requests with an Enrollment filter |
|  | | O | Generates requests with an Event State filter |
|  | | O | Generates requests with an Event Type filter |
|  | | O | Generates requests with a Priority filter |
|  | | O | Generates requests with a Notification Class filter |
|  | | O | Generates requests with multiple filters |
| 1 This BIBB can be claimed if AE-AS-A is also claimed. | | | |
| **Alarm and Event Management - Enrollment Summary - B** | | | |
|  | | R | Base Requirements |
|  | | | |
| **Alarm and Event Management - Information - A** | | | |
|  | | R1 | Base Requirements |
| 1 This BIBB can be claimed if AE-AS-A is also claimed. | | | |
| **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 |
|  | | 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 |
|  | | | |
| **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 |
|  | | R | Supports DM-OCD-A |
|  | | | |
| **Alarm and Event Management - Alarm Summary View - A** | | | |
|  | | R | Base Requirements |
|  | | R | Supports initiation of GetEventInformation service |
|  | | R | Supports initiation of GetAlarmSummary service |
|  | | R | Supports initiation of GetEnrollmentSummary service |
|  | | O | Generates GetEnrollmentSummary requests with an Enrollment filter |
|  | | O | Generates GetEnrollmentSummary requests with an Event State filter |
|  | | O | Generates GetEnrollmentSummary requests with an Event Type filter |
|  | | O | Generates GetEnrollmentSummary requests with a Priority filter |
|  | | O | Generates GetEnrollmentSummary requests with a Notification Class filter |
|  | | O | Generates GetEnrollmentSummary requests with multiple filters |
|  | | | |
| **Alarm and Event Management - LifeSafety - A** | | | |
|  | | R | Base Requirements |
|  | | R | Initiates LifeSafetyOperation requests |
|  | | 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-INFO-A |
|  | | R | Supports AE-AS-A |
|  | | | |
| **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 |
|  | | R | Supports the CHANGE\_OF\_LIFE\_SAFETY Algorithm in Event\_Parameters |
|  | | C2 | Supports AE-ACK-B |
|  | | C3 | Generates event notifications with timestamps of the BACnetDateTime form |
|  | | C3 | Generates event notifications with timestamps of the Time form |
|  | | C3 | Generates event notifications with timestamps of the Sequence Number form |
|  | | O | Mode Transition Tests when Event State is maintained |
|  | | O | Supports Event\_Message\_Texts property |
|  | | O | Supports Event\_Message\_Texts\_Config property |
| 1 At least one of these options must be supported to claim support for 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 unconfigurable Process\_Identifier\_Filter Property |
|  | | C1 | Supports configurable Process\_Identifier\_Filter Property |
| 1 At least one of these options must be supported. | | | |
| **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** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Life Safety Advanced View Notifications - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Life Safety View and Modify - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Life Safety Advanced View and Modify - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Access Control - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Access Control - B** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Access Control Advanced View Notifications - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Access Control View and Modify - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Access Control Advanced View and Modify - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Alarm and Event Management - Elevator View Notifications - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Alarm and Event Management - Elevator Advanced View Notifications - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Alarm and Event Management - Elevator View and Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **Alarm and Event Management - Elevator Advanced View and Modify - A** | | | | |
|  | | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | | |

# Scheduling BIBBs

| **Support** | **Listing** | | | **Option** | |
| --- | --- | --- | --- | --- | --- |
| **Scheduling - Advanced View Modify - A** | | | | | |
|  | | R | Base Requirements | | |
|  | | R | Supports SCHED-VM-A | | |
|  | | R | Supports DM-OCD-A | | |
|  | | R | Is able to read a Schedule object that is self-inconsistent with regard to the scheduled datatype, and modify it to be consistent | | |
|  | | R | Is able to change the datatype that a Schedule object schedules | | |
|  | | | | | |
| **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 Octet String type | | |
|  | | O | Is able to present and modify schedules of Character String type | | |
|  | | O | Is able to present and modify schedules of Bit String 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 | | |
| 1 BTL-R if the IUT claims a revision before Protocol\_Revision 20. | | | | | |
| **Scheduling - Weekly Schedule - A** | | | | | |
|  | | R1 | | | 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 |
|  | | C2 | | | Is able to present and modify Weekly\_Schedule of BOOLEAN type |
|  | | O | | | 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 This BIBB can be claimed even if SCHED-VM-A is also claimed.  2 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 data types (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 | |
|  | BTL-R | | | Is able to schedule NULL values | |
|  | BTL-R | | | Is able to schedule BOOLEAN values | |
|  | BTL-R | | | Is able to schedule Unsigned values | |
|  | BTL-R | | | Is able to schedule REAL values | |
|  | BTL-R | | | Is able to schedule Enumerated values | |
|  | S | | | Is able to schedule values of different data types (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 | |
|  | | | | | |
| **Scheduling - Weekly Schedule - Internal - B** | | | | | |
|  | R1 | | | Base Requirements | |
|  | R | | | Priority\_For\_Writing is writable | |
|  | R | | | Exception\_Schedule property shall not be 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** | | | | | |
|  | R1,2 | | | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB.  2 Protocol\_Revision 17 or higher must be claimed. | | | | | |
| **Scheduling - Timer - External - B** | | | | | |
|  | R1,2 | | | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB.  2 Protocol\_Revision 17 or higher must be claimed. | | | | | |

# Trending BIBBs

| **Support** | **Listing** | | **Option** | |
| --- | --- | --- | --- | --- |
| **Trending - Viewing - A** | | | | |
|  | R | | Base Requirements | |
|  | R | | Initiates ReadRange | |
|  | R | | Interoperates with Trend Logs | |
|  | C1,2 | | Interoperates with Trend Log Multiple objects | |
|  | C3 | | Supports reading items by Time with a positive count | |
|  | C3 | | Supports reading items by Time with a negative count | |
|  | C3 | | Supports reading items by Position with a positive count | |
|  | C3 | | Supports reading items by Position with a negative count | |
|  | C3 | | Supports reading items by Sequence Number with a positive count | |
|  | C3 | | 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 Must be able to present REAL, Unsigned, INTEGER, BOOLEAN, Bit String, Enumerated, and NULL datatypes.  2 Required if the device claims support for Protocol\_Revision 7 or higher.  3 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 | |
|  | R | | Supports T-V-A | |
|  | R | | Supports DS-RP-A | |
|  | R | | Supports DS-WP-A | |
|  | R | | Supports DM-OCD-A | |
|  | | | | |
| **Trending - View and Modify 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 - View and Modify 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 | |
|  | S2 | | 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 - View and Modify 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 | |
|  | S | | Is able to trend REAL datatypes | |
|  | S2 | | Is able to trend Unsigned datatypes | |
|  | S2 | | Is able to trend INTEGER datatypes | |
|  | S | | Is able to trend BOOLEAN datatypes | |
|  | S | | Is able to trend Bit String datatypes | |
|  | S3 | | Is able to trend Enumerated datatypes | |
|  | S | | 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 - View and Modify Multiple Values - External - B** | | | | |
|  | R | | Base Requirements | |
|  | R | | Supports T-VMMV-I-B | |
|  | S | | Is able to trend REAL datatypes | |
|  | S1 | | Is able to trend Unsigned datatypes | |
|  | S1 | | Is able to trend INTEGER datatypes | |
|  | S | | Is able to trend BOOLEAN datatypes | |
|  | S | | Is able to trend Bit String datatypes | |
|  | S2 | | Is able to trend Enumerated datatypes | |
|  | S | | Is able to trend NULL datatypes | |
| 1 Trending of 32 bit Unsigned and INTEGER values is minimally required.  2 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 | |
|  | S2 | | 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 | |
|  | C1 | | Supports T-AMVR-A | |
| 1 Required if the device claims Protocol\_Revision 7 or higher | | | | |
| **Trending - View and Modify Trends - A** | | | | |
|  | | R1 | | Base Requirements |
| 1 This BIBB can be claimed if T-V-A is claimed. | | | | |
| **Trending - View and Modify Multiple Values - A** | | | | |
|  | | R1 | | Base Requirements |
| 1 This BIBB can be claimed if T-V-A is claimed and the IUT claims a Protocol\_Revision 7 or higher | | | | |

# 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 | |
|  | BTL-R | Supports DM-UTC-A | |
|  | | | |
| **Device Management - Time Synchronization - B** | | | |
|  | R | Base Requirements | |
|  | | | |
| **Device Management - UTC Time Synchronization - A** | | | |
|  | R | Base Requirements | |
|  | BTL-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 | |
|  | BTL-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 | |
|  | C2,3 | Supports receiving a DeviceCommunicationControl service request with a finite duration | |
|  | *C*3 | Supports receiving a DeviceCommunicationControl service request with an indefinite duration | |
|  | O | Supports DM-RD-B | |
|  | C4 | 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.  2 This option is required if the device supports an internal clock.  3 At least one of these options is required in order to claim conformance to this BIBB.  4 Required if device implements protocol revision 4 or higher. | | | |
| **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 | |
|  | C1 | Implements ReinitializeDevice COLDSTART with a password | |
|  | C1 | Implements ReinitializeDevice COLDSTART with no password | |
| 1 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 is required in order to claim conformance to this BIBB.  2 At least one of these 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 | |
|  | BTL-R | Can create objects using Object\_Identifier with no initial values | |
|  | S1 | Can create objects using Object\_Type with no initial values | |
|  | S | Can create objects by Object\_Identifier with initial values which includes Object\_Name | |
|  | S1 | Can create objects by Object\_Type with initial values which includes Object\_Name | |
|  | C2 | Can create and delete Accumulator objects | |
|  | C2 | Can create and delete Analog Input objects | |
|  | C2 | Can create and delete Analog Output objects | |
|  | C2 | Can create and delete Analog Value objects | |
|  | C2 | Can create and delete Averaging objects | |
|  | C2 | Can create and delete Binary Input objects | |
|  | C2 | Can create and delete Binary Output objects | |
|  | C2 | Can create and delete Binary Value objects | |
|  | C2 | Can create and delete Calendar objects | |
|  | C2 | Can create and delete Command objects | |
|  | C2 | Can create and delete Event Enrollment objects | |
|  | C2,3 | Can create and delete File objects | |
|  | C2 | Can create and delete Group objects | |
|  | C2 | Can create and delete Life Safety Point objects | |
|  | C2 | Can create and delete Life Safety Zone objects | |
|  | C2 | Can create and delete Loop objects | |
|  | C2 | Can create and delete Multi State Input objects | |
|  | C2 | Can create and delete Multi State Output objects | |
|  | C2 | Can create and delete Multi State Value objects | |
|  | C2 | Can create and delete Notification Class objects | |
|  | C2 | Can create and delete Program objects | |
|  | C2 | Can create and delete Pulse Converter objects | |
|  | C2 | Can create and delete Schedule objects | |
|  | C2 | Can create and delete Trend Log objects | |
|  | C2 | Can create and delete Structured View objects | |
|  | C2 | Can create and delete Load Control objects | |
|  | C2 | Can create and delete Access Door objects | |
|  | C2 | Can create and delete Proprietary objects | |
|  | C2 | Can create and delete Event Log objects | |
|  | C2 | Can create and delete Trend Log Multiple objects | |
|  | C2 | Can create and delete CharacterString Value objects | |
|  | C2 | Can create and delete DateTime Value objects | |
|  | C2 | Can create and delete Large Analog Value objects | |
|  | C2 | Can create and delete BitString Value objects | |
|  | C2 | Can create and delete OctetString Value objects | |
|  | C2 | Can create and delete Time Value objects | |
|  | C2 | Can create and delete Integer Value objects | |
|  | C2 | Can create and delete Positive Integer Value objects | |
|  | C2 | Can create and delete Date Value objects | |
|  | C2 | Can create and delete DateTime Pattern Value objects | |
|  | C2 | Can create and delete Time Pattern Value objects | |
|  | C2 | Can create and delete Date Pattern Value objects | |
|  | C2 | Can create and delete Network Security objects | |
|  | C2 | Can create and delete Global Group objects | |
|  | C2 | | Can create and delete Access Point objects |
|  | C2 | | Can create and delete Access Zone objects |
|  | C2 | | Can create and delete Access User objects |
|  | C2 | | Can create and delete Access Rights objects |
|  | C2 | | Can create and delete Access Credential objects |
|  | C2 | | Can create and delete Credential Data objects |
|  | C2 | | Can create and delete Notification Forwarder objects |
|  | C2 | | Can create and delete Alert Enrollment objects |
|  | C2 | | Can create and delete Channel objects |
|  | C2 | | Can create and delete Lighting Output objects |
|  | C2,4 | | Can create and delete Binary Lighting Output objects |
|  | C2,5 | | Can create and delete Network Port objects |
|  | C2,5 | | Can create and delete Timer objects |
|  | C2,6 | | Can create and delete Elevator Group objects |
|  | C2,6 | | Can create and delete Lift objects |
|  | C2,6 | | Can create and delete Escalator objects |
|  | C2,7 | | Can create and delete Staging objects |
|  | C2,7 | | Can create and delete Audit Reporter objects |
|  | C2,7 | | Can create and delete Audit Log objects |
| 1 For each object type where the IUT supports creation with the CreateObject service, the Object\_Identifier form of CreateObject shall be supported.  2 At least one of these is required in order to claim conformance to this BIBB.  3 IUT should not claim this functionality if the only method of creating a File object is by initiating the device restore procedure.  4 Protocol\_Revision 16 or higher must be claimed.  5 Protocol\_Revision 17 or higher must be claimed.  6 Protocol\_Revision 18 or higher must be claimed.  7 Protocol\_Revision 20 or higher must be claimed. | | | |
| **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 |
| 1 At least one of these 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. | | | |
| **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 / Device\_Address\_Binding entries | |
|  | C1 | Supports adding and removing Device / Active\_COV\_Subscriptions entries | |
|  | C1 | Supports adding and removing Device / Manual\_Slave\_Address\_Binding entries | |
|  | C1 | Supports adding and removing Device / Slave\_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\_Slave\_Address\_Binding entries | |
|  | C1,2 | Supports adding and removing Network Port / Virtual\_MAC\_Address\_Table entries | |
|  | C1,2 | Supports adding and removing Network Port / Slave\_Address\_Binding 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 Device / Active\_COV\_Multiple\_Subscriptions 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 must be supported to claim support for 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 | |
|  | R1 | Supports DS-WP-B | |
| 1 A writable list property is one which is modifiable via any BACnet service. | | | |
| **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 shall be supported.  2 At least one of these options shall be supported. | | | |
| **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 - Slave Proxy - View and Modify - A** | | | |
|  | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Device Management - Slave Proxy - B** | | | |
|  | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Device Management - Dynamic Device Assignment - A** | | | |
|  | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Device Management - Dynamic Device Assignment - B** | | | |
|  | R1 | Base Requirements | |
| 1 Contact BTL for interim tests for this BIBB. | | | |

# Data Link Layer

| **Support** | **Listing** | **Option** |
| --- | --- | --- |
| **Data Link Layer - MS/TP - Master Node** | | |
|  | R | Base Requirements |
|  | C1 | Supports writable Max\_Master property |
|  | C1 | Supports read only Max\_Master 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) |
| 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. | | |
| **Data Link Layer - MS/TP - Slave Node** | | |
|  | R | Base Requirements |
|  | | |
| **BACnet/IP - Annex J - non-BBMD Functionality** | | |
|  | R | Base Requirements |
|  | BTL-C1 | Is able to register as a Foreign Device |
|  | O | Is able to initiate Original-Broadcast-NPDU |
| 1 This option is required if the device does not claim Annex J BACnet/IP BBMD support. | | |
| **BACnet/IP - Annex J - BBMD** | | |
|  | R | Base Requirements |
|  | BTL-R | Supports a BDT with at least four entries |
|  | R | Registration by a Foreign Device is supported |
|  | R | Supports 2-hop mode |
|  | O | Supports 1-hop mode |
|  | O | BBMD supports Network Address Translation |
|  | O | Is able to initiate Original-Broadcast-NPDU |
|  | | |
| **Data Link Layer - ZigBee** | | |
|  | R | Base Requirements |
|  | | |
| **Data Link Layer - Ethernet** | | |
|  | R | Base Requirements |
|  | | |
| **Data Link Layer - ARCNET** | | |
|  | R | Base Requirements |
|  | | |
| **Data Link Layer - LonTalk** | | |
|  | R | Base Requirements |
|  | | |
| **Data Link Layer - IPv6** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB | | |
| **Data Link Layer - Secure Connect** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |

# 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 One or more of these options is required in order to claim in this section. | | | |
| **Network Management - Router Configuration - B** | | | |
|  | R | | Base Requirements |
|  | R | | Supports Routing |
|  | R1 | | Supports DS-WP-B |
| 1 Required if the device implements protocol revision 17 or higher. | | | |
| **Network Management - Connection Establishment - A** | | | |
|  | R | | Base Requirements |
|  | | | |
| **Network Management - Connection Establishment - B** | | | |
|  | R1 | | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Network Management - Router Configuration - A** | | | |
|  | R1 | | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Network Management - BBMD Configuration - A** | | | |
|  | R1 | | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Network Management - BBMD Configuration - B** | | | |
|  | R1 | | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Network Management - Foreign Device Registration - A** | | | |
|  | R | | Base Requirements |
|  | BTL-R | | Supports configurable BBMD Address |
|  | O | | Supports a mode where it transmits a broadcast at startup |
|  | O | | Supports configurable Time-to-Live |
| **Network Management - Secure Connect Hub - B** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Network Management - Secure Connect Direct Connect - A** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |
| **Network Management - Secure Connect Direct Connect - B** | | | |
|  | | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | |

# Gateway

| **Support** | | **Listing** | | **Option** |
| --- | --- | --- | --- | --- |
| **Gateway - Virtual Network - B** | | | | |
|  | | R1 | | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | | | |
| **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** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Audit Reporting - Reporter - B** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Audit Reporting - Reporter - Simple - B** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Audit Reporting - Forwarder - B** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Audit Reporting - View - A** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |
| **Audit Reporting - Advanced View and Modify - A** | | |
|  | R1 | Base Requirements |
| 1 Contact BTL for interim tests for this BIBB. | | |

# 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. |