# Bond Management Service (BMS)

***Bluetooth*® Implementation Conformance Statement (ICS) Proforma**

- **Revision:** BMS.ICS.p4
- **Revision Date:** 2025-07-08
- **Prepared By:** Medical Devices Working Group
- **Published during TCRL:** TCRL.pkg100

# Contents

# 1 General principles

## 1.1 Implementation Under Test (IUT) identification

Using the Bluetooth SIG qualification tool, the implementer is expected to declare details about what will be implemented.

## 1.2 Enforcement of inter-layer dependencies

This ICS includes one or more tables with inter-layer dependencies (ILDs). ILDs are used for specification requirements that are dependent on other supporting specifications. ILDs can refer to an individual ICS item in a separate layer (individual ILD), or it can refer to the full layer (full-layer ILD).

ILDs residing in an X2Core layer will be enforced from the Bluetooth SIG qualification tool in the following conditions, depending on where the referred ILD is residing:

| Referred ILD resides in | Individual ILD | Full-layer ILD |
|---|---|---|
| Controller layer | Core-Complete configuration, or<br>Referred layer is supported | N/A |
| Lower HCI layer | HCI is supported | N/A |
| Upper HCI layer | Core-Host configuration, or<br>UHCI is supported | N/A |
| Host layer | Core-Host configuration, or<br>Core-Complete configuration, or<br>Referred layer is supported | N/A |
| X2Core layer | Core-Host configuration, or<br>Core-Complete configuration, or<br>Referred layer is supported | Core-Host configuration, or<br>Core-Complete configuration |

*Table 1.1: Enforcement of an ILD within the Bluetooth SIG qualification tool*

# 2 ICS declarations

## 2.1 Versions

**Table 0: X.Y Versions**

| Item | Version | Reference | Status |
|---|---|---|---|
| 1 | BMS v1.0 | [1] | C.1, C.2 |

C.1: Mandatory.

C.2: Can only be supported with an active X.Y.Z version after Deprecation or Withdrawal. Deprecated 2023-02-01. Withdrawn 2025-02-01.

**Table 0a: X.Y.Z Versions**

| Item | Version | Reference | Status |
|---|---|---|---|
| 1 | BMS v1.0.1 | [1] | C.1 |

C.1: Mandatory IF BMS 0/1 “BMS v1.0”, otherwise Excluded.

## 2.2 Roles

**Table 1: Role Requirements**

| Item | Role | Reference | Status |
|---|---|---|---|
| 1 | Bond Management Service Server | [1] 2 | M |

## 2.3 Transports

**Table 2: Transport Requirements**

| Item | Transport | Reference | Status |
|---|---|---|---|
| 1 | Service supported over BR/EDR | [1] 1.6 | C.1, C.3 |
| 2 | Service supported over LE | [1] 1.6 | C.2, C.3 |

C.1: Excluded for this Service IF CORE 41/2 “LE Core Configuration”.

C.2: Excluded for this Service IF CORE 41/1 “BR/EDR Core Configuration”.

C.3: Mandatory to support at least one.

## 2.4 Bond Management Service Server

### 2.4.1 Features

**Table 2a: Feature Requirements**

| Item | Capability | Reference | Status |
|---|---|---|---|
| 1 | Bond Management Control Point characteristic | [1] 3, 3.1 | M |
| 2 | Bond Management Feature characteristic | [1] 3, 3.2 | M |
| 3 | Bond Management Control Point - Reliable Write | [1] 3, 3.1 | O |
| 4 | Indications for changes of supported features | [3] 3.2.1 | M |

**Table 2b: Indications for changes of supported features**

*Prerequisite: BMS 2a/4 "Indications for changes of supported features"*

| Item | Capability | Reference | Status |
|---|---|---|---|
| 1 | Changeable Bond Management Feature | [3] 3, 3.2.1 | O |
| 2 | Bond Management Feature characteristic indication | [3] 3, 3.2.1 | C.1 |

C.1: Mandatory IF BMS 2b/1 "Changeable Bond Management Feature", otherwise Excluded.

### 2.4.2 Control Point Operations

**Table 3: Control Point Operations**

| Item | Capability | Reference | Status |
|---|---|---|---|
| 1 | Delete bond of requesting device without authorization code | [1] 3.1.1 | C.1 |
| 2 | Delete all bonds on server without authorization code | [1] 3.1.1 | O |
| 3 | Delete all but the active bond on server without authorization code | [1] 3.1.1 | O |
| 4 | Delete bond of requesting device with authorization code | [1] 3.1.1 | C.1 |
| 5 | Delete all bonds on server with authorization code | [1] 3.1.1 | O |
| 6 | Delete all but the active bond on server with authorization code | [1] 3.1.1 | O |

C.1: Mandatory to support at least one.

#### 2.4.2.1 Control Point Authorization Code

**Table 4: Control Point Authorization Code**

| Item | Capability | Reference | Status |
|---|---|---|---|
| 1 | Large authorization codes | [1] 3.1, 3.1.2 | O |

Note: Large authorization codes have a length of more than (minimum MTU – 1) bytes.

## 2.5 GATT requirements

**Table 5: GATT Requirements**

| Item | Capability | Reference | Status | Inter-Layer Dependency |
|---|---|---|---|---|
| 1 | No longer used | N/A | N/A | N/A |
| 1a | GATT Server over BR/EDR | [1] 1.5 | C.3 | [2] GATT 1a/4 |
| 1b | GATT Server over LE | [1] 1.5 | C.4 | [2] GATT 1a/3 |
| 2 | Write Characteristic Value | [1] 1.5 | M | [2] GATT 4/14 |
| 3 | Write Long Characteristic Values | [1] 1.5 | C.1 | [2] GATT 4/15 |
| 4 | Characteristic Value Reliable Writes | [1] 1.5 | C.2 | [2] GATT 4/16 |

C.1: Mandatory IF BMS 4/1 "Large authorization codes", otherwise Optional.

C.2: Mandatory IF BMS 2a/3 "Bond Management Control Point - Reliable Write", otherwise not defined.

C.3: Mandatory IF BMS 2/1 "Service supported over BR/EDR", otherwise not defined.

C.4: Mandatory IF BMS 2/2 "Service supported over LE", otherwise not defined.

## 2.6 SDP requirements

**Table 6: SDP requirements**

*Prerequisite: BMS 2/1 “Service supported over BR/EDR”*

| Item | Capability | Reference | Status |
|---|---|---|---|
| 1 | SDP record present for BMS | [1] 4 | M |
| 2–3 | No longer used | N/A | N/A |

# 3 References

[1] Bond Management Service Specification, Version 1.0 or later

[2] ICS Proforma for Generic Attribute Profile (GATT)

[3] Bond Management Service Specification, Version 1.0.1

# 4 Revision history and acknowledgments

***Revision History***

| Publication Number | Revision Number | Date | Comments |
|---|---|---|---|
| 0 | 1.0.0 | 2014-10-21 | Publication |
| | 1.0.1r00 | 2018-02-07 | TSE 9946 (rating 1): Updated template. Removed Global Statement of Conformance to reflect current ICS conventions. Corrected Table 6 pre-requisite and conditionals. |
| 1 | 1.0.1 | 2018-06-27 | Approved by BTI. Prepared for TCRL 2018-1 publication. |
| | p2r00–r07 | 2021-02-16 – 2021-12-22 | TSE 16764 (rating 4): Added new ICS item 0a/1 for BMS v1.0.1 and new conditional C.1 in Table 0 for BMS v1.0. Added new ICS item 2a/4 and table (Table 2b) for E15767 - proper handling of changing supported features by characteristic indication. Added a reference for Bond Management Service Specification v1.0.1.<br>TSE 18046 (rating 3): Added ICS Table 2a “Feature Requirements” items 1–3 and ICS for BMS Control Point and BMS Feature characteristics. Updated the conditional of BMS 5/4.<br>TSE 18050 (rating 2): Updated the Control Point Tables 3 and 4 references and conditionals.<br>Updated ICS to latest template and made editorial changes, including updating the copyright page to align with v2 of the DNMD and fixing C.1 in Table 2a. |
| 2 | p2 | 2022-01-25 | Approved by BTI on 2022-01-06. Prepared for TCRL 2021-2 publication. |
| | p3r00–r01 | 2023-09-11 – 2023-12-11 | TSE 23645 (rating 2): Resolved SDP inter-layer dependencies. Added a conditional to Table 0 and updated the existing C.1 (now C.2) and the Status value for Item 1. In Table 0a, updated C.1. In Table 2a, updated the Status value for Item 4 and deleted C.1. In Table 6, deleted the ILD column, updated the Capability value for Item 1, and marked Items 2 and 3 as no longer used. Updated the references.<br>Made editorial edits to align the document with the latest ICS template, including updates to C.1 in Table 2, C.1 in Table 2b, C.1 in Table 3, and C.1 and C.2 in Table 5. Deleted draft revision history comments prior to p0. |
| 3 | p3 | 2024-07-01 | Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication. |

| Publication Number | Revision Number | Date | Comments |
|---|---|---|---|
| | p4r00–r01 | 2025-01-27 – 2025-02-18 | TSE 26839 (rating 2): Updated conditional C.2 for Table 0. Marked item 1 as no longer used, added items 1a and 1b, and added conditionals C.3 and C.4 for Table 5.<br>TSE 27075 (rating 1): Updated status for items 1 and 2, updated conditional C.1, and added conditionals C.2 and C.3 for Table 2. |
| 4 | p4 | 2025-07-08 | Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication. |

***Acknowledgments***

| Name | Company |
|---|---|
| Jörg Brakensiek | Bluetooth SIG, Inc. |
| Ismail Mohamud | Bluetooth SIG, Inc. |
| Alicia Courtney | Broadcom |
| Magnus Sommansson | Qualcomm |
| Wolfgang Heck | Roche |
| Rasmus Abildgren | Samsung Electronics Co., Ltd. |