Multi-Channel Adaptation Protocol (MCAP)

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

- **Revision:** MCAP.ICS.p9
- **Revision Date:** 2026-06-23
- **Prepared By:** BTI
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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 Referred layer is supported	N/A
Lower HCI layer	HCI is supported	N/A
Upper HCI layer	Core-Host configuration, or UHCI is supported	N/A
Host layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	N/A
X2Core layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	Core-Host configuration, or 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	MCAP v1.0	[1]	C.1, C.2

C.1: Mandatory for this Profile.

C.2: Excluded after Deprecation or Withdrawal. Deprecated 2028-02-01. Withdrawn 2030-02-01.

2.2 Core Configuration

Table 0a: Core Configuration Requirements

Item	Core Configuration	Reference	Status
1	Protocol supported over BR/EDR	[1] 3.4	C.1, C.3
2	Protocol supported over LE	[1] 3.4	C.2

C.1: Excluded for this Protocol IF CORE 41/2 “LE Core Configuration” OR CORE 40/1 “Core-Controller”.

C.2: Excluded for this Protocol.

C.3: Mandatory for this Protocol.

2.3 Protocols and roles

Table 1a: Protocol Requirements

Item	Protocol	Reference	Status
1	Standard Op Codes	[1] 3, 4	C.1
2	Clock Synchronization Protocol Op Codes	[1] 5	C.1

C.1: Mandatory to support at least one.

Table 1: Role Requirements

Item	Role	Reference	Status
1	Source	[1] 3.4	C.1
2	Sink	[1] 3.4	C.1
3	Sync-Slave	[1] 5.1.3.1	C.2
4	Sync-Master	[1] 5.1.3.2	C.3

C.1: Mandatory to support at least one IF MCAP 1a/1 “Standard Op Codes”, otherwise Excluded.

C.2: Mandatory IF MCAP 1a/2 “Clock Synchronization Protocol Op Codes”, otherwise Excluded.

C.3: Optional IF MCAP 1a/2 “Clock Synchronization Protocol Op Codes”, otherwise Excluded.

2.4 Source role

Table 2: No longer used

Table 3: Connection Management – Source

Prerequisite: MCAP 1/1 "Source"

Item	Capability	Reference	Status
1	No longer used	N/A	N/A
2	Initiate creation of Control and Data Channels	[1] 4.3	C.1
3	Accept creation of Control and Data Channels	[1] 4.3	C.1
4	Initiate Disconnection of MCL	[1] 4.3	M
5	Accept Disconnection of MCL	[1] 4.3	M
6	Initiate Disconnection of MDL	[1] 4.3	M
7	Accept Disconnection of MDL	[1] 4.3	M
8	Initiate Reconnection of MDL	[1] 4.3	O
9	Accept Reconnection of MDL	[1] 4.3	C.2
10	Initiate Deletion of MDL	[1] 4.3	O
11	Accept Deletion of MDL	[1] 4.3	M
12	Initiate Delete of All MDLs using 0xFFFF	[1] 4.3	O
13	Accept Delete of All MDLs using 0xFFFF	[1] 4.3	M
14	Send MDL Abort request	[1] 4.3	O
15	Accept MDL Abort request	[1] 4.3	M

C.1: Mandatory to support at least one.

C.2: Mandatory IF MCAP 3/3 "Accept creation of Control and Data Channels", otherwise Excluded.

2.5 Sink role

Table 4: No longer used

Table 5: Connection Management – Sink

Prerequisite: MCAP 1/2 "Sink"

Item	Capability	Reference	Status
1	No longer used	N/A	N/A
2	Initiate creation of Control and Data Channels	[1] 4.3	M
3	Accept creation of Control and Data Channels	[1] 4.3	M
4	Initiate Disconnection of MCL	[1] 4.3	M
5	Accept Disconnection of MCL	[1] 4.3	M
6	Initiate Disconnection of MDL	[1] 4.3	M
7	Accept Disconnection of MDL	[1] 4.3	M
8	Initiate Reconnection of MDL	[1] 4.3	O
9	Accept Reconnection of MDL	[1] 4.3	M

Item	Capability	Reference	Status
10	Initiate Deletion of MDL	[1] 4.3	O
11	Accept Deletion of MDL	[1] 4.3	M
12	Initiate Delete of All MDLs using 0xFFFF	[1] 4.3	O
13	Accept Delete of All MDLs using 0xFFFF	[1] 4.3	M
14	Send MDL Abort request	[1] 4.3	O
15	Accept MDL Abort request	[1] 4.3	M

2.6 Sync-Slave role

Table 6: Clock Synchronization Features – Sync-Slave

Prerequisite: MCAP 1/3 "Sync-Slave"

Item	Capability	Reference	Status
1	Accept MD_SYNC_CAP_REQ and MD_SYNC_SET_REQ and Initiate MD_SYNC_INFO_IND	[1] 5.4	M
2	No longer used	N/A	N/A
3	Multiple simultaneous MCLs with CSP	[1] 5.3	O
4	Access Bluetooth Clock	[1] 5.1.1	O

2.7 Sync-Master role

Table 7: Clock Synchronization Features – Sync-Master

Prerequisite: MCAP 1/4 "Sync-Master"

Item	Capability	Reference	Status
1	No longer used	N/A	N/A
2	Initiate MD_SYNC_CAP_REQ and MD_SYNC_SET_REQ and Accept MD_SYNC_INFO_IND	[1] 5.4	M
3	Multiple simultaneous MCLs with CSP	[1] 5.3	O
4	Access Bluetooth Clock	[1] 5.1.1	O

2.8 L2CAP requirements

Table 8: L2CAP Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Logical Link Control and Adaptation Protocol (L2CAP)	[1] 2	M	[2] L2CAP

3 References

[1] Multi-Channel Adaptation Protocol (MCAP), Version 1.0

[2] ICS Proforma for Logical Link Control and Adaptation Protocol (L2CAP)

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2008-06-24	Prepared for publication.
	1.01.r0	2011-01-06	TSE 3846: Update prerequisite wording to allow for Dual Mode Host.
	1.0.1r1	2011-02-08	TSE 3335: Footnote C.1 added for Item 6/1
1	1.0.1	2011-07-21	Prepare for publication.
	1.0.2r0	2011-11-16	TSE 3336 per Proposed Change TSE 3326: Change Prerequisite for Table 1a.
2	1.0.2	2012-03-30	Prepare for publication.
	1.0.3r00	2017-04-18	TSE 8371: Template converted, added Table 0, and removed pre-requisites that are for support for 2.0 or later.
3	1.0.3	2017-07-03	Approved by BTI. Prepared for TCRL 2017-1 publication.
	1.0.4r00	2017-08-21	TSE 9700: In Connection Management – Sink, corrected Status for 5/9.
4	1.0.4	2017-11-28	Approved by BTI. Prepared for TCRL 2017-2 publication.
	p5r00	2022-10-30	TSE 20384 (rating 1): Updated to align with current ICS conventions/template. Removed Support columns and “is supported” language. In Table 0, updated the version and reference. In Table 1a, updated the table title, protocol names, references, and C.1. In Table 1, updated the table title, role names, references, and C.1–C.3. In Table 2, updated the prerequisite, capabilities, and references. In Table 3, marked Item 1 as no longer used and updated the references, C.1, and C.2. In Table 4, updated the prerequisite, capabilities, and references. In Table 5, marked Item 1 as no longer used and updated the prerequisite and the references. In Table 6, marked Item 2 as no longer used and updated the prerequisite, capabilities, references, and C.1. In Table 7, marked Item 1 as no longer used and updated the prerequisite, capabilities, and references. Updated the references list. Added a Publication Number column to the Revision History. Revised the document numbering convention, setting the last release publication of 1.0.4 as p4. Performed additional template-related formatting fixes. Replaced the Bluetooth logo in the footer and updated the copyright page to align with v2 of the DNMD.
5	p5	2023-02-07	Approved by BTI on 2022-12-19. Prepared for TCRL 2022-2 publication.

Publication Number	Revision Number	Date	Comments
	p6r00	2023-10-18	TSE 24172 (rating 2): Added Table 8 (L2CAP requirements). Updated to align the document with the latest ICS template, including updates to the section and table titles. Updated the references. In Table 1, updated C.1 and the Role value for Items 1–4. In Tables 1a and 3, updated C.1. Marked Tables 2 and 4 as no longer used. Updated the prerequisite for Tables 3 and 5–7. In Table 6, updated the Status value for Item 1 and the Reference value for Item 3 and deleted C.1. In Table 7, updated the Reference value for Item 3.
6	p6	2024-07-01	Approved by BTI on 2024-05-22. Prepared for TCRL 2024-1 publication.
	p7r00	2025-02-27	TSE 27010 (rating 2): Added “Core Configuration” section and Table 0a. Applied the current ICS template.
7	p7	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.
	p8r00	2025-12-05 – 2026-01-08	TSE 28346 (rating 1): Updated the conditions in the transport table to make sure the layer is excluded when the design is an implementation of the Core-Controller Configuration by adding "OR CORE 40/1 “Core-Controller”" to an already excluded transport based on Core Configuration support.
8	p8	2026-02-17	Approved by BTI on 2026-01-22. Prepared for TCRL pkg102 publication.
	p9r00	2026-03-10	TSE 28658 (rating 1): Applied 2024 Annual Non-Core D&W decision to MCAP v1.0. Updated Table 0/1 as follows: Replaced M status for MCAP v1.0 with new conditions C.1, C.2 and added associated C.1 and C.2 statements.
9	p9	2026-06-23	Approved by BTI on 2026-05-28. Prepared for TCRL pkg104 publication.

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