

Calendar, Tasks and Notes Profile (CTN)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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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	CTN v1.0	[1]	M

Table 0a: X.Y.Z Versions

Item	Version	Reference	Status
1	CTN v1.0.1	[1]	C.1

C.1: Optional IF CTN 0/1 “CTN v1.0”, otherwise Excluded.

2.2 Core Configuration

Table 0b: Core Configuration Requirements

Item	Core Configuration	Reference	Status
1	Profile supported over BR/EDR	[1] 2.1	C.1, C.3
2	Profile supported over LE	[1] 2.1	C.2

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

C.2: Excluded for this Profile.

C.3: Mandatory for this Profile.

2.3 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	CTN Client Equipment	[1] 2.2	C.1
2	CTN Server Equipment	[1] 2.2	C.1

C.1: Mandatory to support at least one.

2.4 CTN Client Equipment (CCE)

2.4.1 CTN Services

Table 2: Supported CTN Services CCE

Prerequisite: CTN 1/1 “CTN Client Equipment”

Item	Feature	Reference	Status
1a	CTN Access Service, single account	[1] 3.5	M
1b	CTN Access Service, multiple accounts	[1] 3.5	O
2	CTN Notification Service	[1] 4.3	O

2.4.2 CTN Profile Features

Table 3: Supported Features CCE

Prerequisite: CTN 1/1 "CTN Client Equipment"

Item	Feature	Reference	Status
1	CTN Account Management	[1] 4.2	M
1a	GetCTNAccountInformation	[1] 5.9	M
1b	CTNNotificationRegistration	[1] 5.2	C.1
1c	SyncCTNAccount	[1] 5.10	O
2	CTN Notification	[1] 4.3	C.1, C.2
2a	SendCTNEvent	[1] 5.1	C.3
3	CTN Browsing	[1] 4.4	C.2
3a	GetCTNListing	[1] 5.3	C.4
4	CTN Downloading	[1] 4.5	M
4a	GetCTNObject	[1] 5.4	M
4b	SetCTNStatus	[1] 5.5	M
5	CTN Uploading	[1] 4.6	O
5a	PushCTNObject	[1] 5.6	C.5
6	CTN Forward	[1] 4.7	O
6a	ForwardCTN	[1] 5.7	C.6
7	No longer used	N/A	N/A
7a	EVENT	[1] 3.3.1	C.7
7b	TASK	[1] 3.3.1	C.7
7c	NOTE	[1] 3.3.1	C.7
8	CTN Delete	[1] 4.8	O
8a	SetCTNStatus	[1] 5.5	C.8

C.1: Mandatory IF CTN 2/2 "CTN Notification Service", otherwise Excluded.

C.2: Mandatory to support at least one.

C.3: Mandatory IF CTN 3/2 "CTN Notification", otherwise Excluded.

C.4: Mandatory IF CTN 3/3 "CTN Browsing", otherwise Excluded.

C.5: Mandatory IF CTN 3/5 "CTN Uploading", otherwise Excluded.

C.6: Mandatory IF CTN 3/6 "CTN Forward", otherwise Excluded.

C.7: Mandatory to support at least one.

C.8: Mandatory IF CTN 3/8 "CTN Delete", otherwise Excluded.

2.5 CTN Server Equipment (CSE)

2.5.1 CTN Services

Table 4: Supported CTN Services CSE

Prerequisite: CTN 1/2 "CTN Server Equipment"

Item	Feature	Reference	Status
1a	CTN Access Service, single account	[1] 3.5	M



Item	Feature	Reference	Status
1b	CTN Access Service, multiple accounts	[1] 3.5	O
2	CTN Notification Service	[1] 4.3	M

2.5.2 CTN Profile Features

Table 5: Supported Features CSE

Prerequisite: CTN 1/2 “CTN Server Equipment”

Item	Feature	Reference	Status
1	CTN Account Management	[1] 4.2	M
1a	GetCTNAccountInformation	[1] 5.9	M
1b	CTNNotificationRegistration	[1] 5.2	M
1c	SyncCTNAccount	[1] 5.10	O
2	CTN Notification	[1] 4.3	M
2a	SendCTNEvent	[1] 5.1	M
3	CTN Browsing	[1] 4.4	M
3a	GetCTNListing	[1] 5.3	M
4	CTN Downloading	[1] 4.5	M
4a	GetCTNObject	[1] 5.4	M
4b	SetCTNStatus	[1] 5.5	M
5	CTN Uploading	[1] 4.6	M
5a	PushCTNObject	[1] 5.6	M
6	CTN Forward	[1] 4.7	M
6a	ForwardCTN	[1] 5.7	M
7	No longer used	N/A	N/A
7a	EVENT	[1] 3.3.1	C.1
7b	TASK	[1] 3.3.1	C.1
7c	NOTE	[1] 3.3.1	C.1
8	CTN Delete	[1] 4.8	O
8a	SetCTNStatus	[1] 5.5	M

C.1: Mandatory to support at least one.

3 Requirements Towards Other Bluetooth Layers

3.1 GAP requirements

Table 6: GAP Mode Requirements (CCE)

Prerequisite: CTN 1/1 “CTN Client Equipment”

Item	Feature	Reference	Status	Inter-Layer Dependency
1	General discoverable mode	[1] 6.4, [2] 6.4.1	C.1	[3] GAP 1/3
1a	Limited discoverable mode	[1] 6.4, [2] 6.4.1	C.1	[3] GAP 1/2
2	Bondable mode	[1] 6.4, [2] 6.4.1	M	[3] GAP 1/7

C.1: Mandatory to support at least one.

Table 7: No longer used

Table 8: GAP Mode Requirements (CSE)

Prerequisite: CTN 1/2 “CTN Server Equipment”

Item	Feature	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	Bondable mode	[1] 6.4, [2] 6.4.1	M	[3] GAP 1/7

Table 9: GAP Idle Mode Requirements (CSE)

Prerequisite: CTN 1/2 “CTN Server Equipment”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Initiation of general inquiry	[1] 6.4, [2] 6.4.3	M	[3] GAP 3/1
2	No longer used	N/A	N/A	N/A
3	Initiation of general bonding	[1] 6.4, [2] 6.1.1	M	[3] GAP 3/5

3.2 GOEP requirements

3.2.1 GOEP requirements (CCE)

Table 10: CCE OBEX Functions Support for CAS

Prerequisite: CTN 1/1 “CTN Client Equipment”

Item	OBEX Operation	Reference	Status
1	Connect (Client)	[1] 6.2.2	M
2	Disconnect (Client)	[1] 6.2.2	M
3	Put (Client)	[1] 6.2.2	M



Item	OBEX Operation	Reference	Status
4	Get (Client)	[1] 6.2.2	M
5	Abort (Client)	[1] 6.2.2	M

Table 11: CCE OBEX Functions Support for CNS*Prerequisite: CTN 1/1 "CTN Client Equipment"*

Item	OBEX Operation	Reference	Status
1	Connect (Server)	[1] 6.2.2	C.1
2	Disconnect (Server)	[1] 6.2.2	C.1
3	Put (Server)	[1] 6.2.2	C.1
4	Abort (Server)	[1] 6.2.2	C.1

C.1: Mandatory IF CTN 2/2 "CTN Notification Service", otherwise Optional.

Table 12: CCE OBEX Header Support*Prerequisite: CTN 1/1 "CTN Client Equipment"*

Item	OBEX Header	Reference	Status
1	Name	[1] 6.2.3	M
2	Type	[1] 6.2.3	M
3	Body	[1] 6.2.3	M
4	End of Body	[1] 6.2.3	M
5	Target	[1] 6.2.3	M
6	Who	[1] 6.2.3	M
7	Connection ID	[1] 6.2.3	M
8	Application Parameters	[1] 6.2.3	M
9	SRM	[1] 6.2.3	M
10	Receive SRMP	[1] 6.2.3	M
11	Send SRMP	[1] 6.2.3	O

Table 13: CCE OBEX Client Error Codes Recognition*Prerequisite: CTN 1/1 "CTN Client Equipment"*

Item	OBEX Operation	Reference	Status
1	Bad Request	[1] 6.2.6, [2] 6.2.7	M
2	Not Implemented	[1] 6.2.6, [2] 6.2.7	M
3	Unauthorized	[1] 6.2.6, [2] 6.2.7	M
4	Precondition Failed	[1] 6.2.6, [2] 6.2.7	M
5	Not Found	[1] 6.2.6, [2] 6.2.7	M
6	Not Acceptable	[1] 6.2.6, [2] 6.2.7	M

Item	OBEX Operation	Reference	Status
7	Service Unavailable	[1] 6.2.6, [2] 6.2.7	M
8	Forbidden	[1] 6.2.6, [2] 6.2.7	M

Table 14: CCE OBEX Server Error Codes Reporting*Prerequisite: CTN 2/2 “CTN Notification Service”*

Item	OBEX Operation	Reference	Status
1	Bad Request	[1] 6.2.6, [2] 6.2.7	M
2	Not Implemented	[1] 6.2.6, [2] 6.2.7	M
3	Unauthorized	[1] 6.2.6, [2] 6.2.7	O
4	Precondition Failed	[1] 6.2.6, [2] 6.2.7	O
5	Not Found	[1] 6.2.6, [2] 6.2.7	O
6	Not Acceptable	[1] 6.2.6, [2] 6.2.7	O
7	Service Unavailable	[1] 6.2.6, [2] 6.2.7	O
8	Forbidden	[1] 6.2.6, [2] 6.2.7	O

3.2.2 GOEP requirements (CSE)

Table 15: CSE OBEX Functions Support for CAS*Prerequisite: CTN 1/2 “CTN Server Equipment”*

Item	OBEX Operation	Reference	Status
1	Connect (Server)	[1] 6.2.2	M
2	Disconnect (Server)	[1] 6.2.2	M
3	Put (Server)	[1] 6.2.2	M
4	Get (Server)	[1] 6.2.2	M
5	Abort (Server)	[1] 6.2.2	M
6	No longer used	N/A	N/A

Table 16: CSE OBEX Functions Support for CNS*Prerequisite: CTN 1/2 “CTN Server Equipment”*

Item	OBEX Operation	Reference	Status
1	Connect (Client)	[1] 6.2.2	M
2	Disconnect (Client)	[1] 6.2.2	M
3	Put (Client)	[1] 6.2.2	M
4	Abort (Client)	[1] 6.2.2	M

Table 17: CSE OBEX Header Support*Prerequisite: CTN 1/2 "CTN Server Equipment"*

Item	OBEX Header	Reference	Status
1	Name	[1] 6.2.3	M
2	Type	[1] 6.2.3	M
3	Body	[1] 6.2.3	M
4	End of Body	[1] 6.2.3	M
5	Target	[1] 6.2.3	M
6	Who	[1] 6.2.3	M
7	Connection ID	[1] 6.2.3	M
8	Application Parameters	[1] 6.2.3	M
9	SRM	[1] 6.2.3	M
10	Receive SRMP	[1] 6.2.3	M
11	Send SRMP	[1] 6.2.3	O

Table 18: CSE OBEX Client Error Codes Recognition*Prerequisite: CTN 1/2 "CTN Server Equipment"*

Item	OBEX Operation	Reference	Status
1	Bad Request	[1] 6.2.6, [2] 6.2.7	M
2	Not Implemented	[1] 6.2.6, [2] 6.2.7	M
3	Unauthorized	[1] 6.2.6, [2] 6.2.7	M
4	Precondition Failed	[1] 6.2.6, [2] 6.2.7	M
5	Not Found	[1] 6.2.6, [2] 6.2.7	M
6	Not Acceptable	[1] 6.2.6, [2] 6.2.7	M
7	Service Unavailable	[1] 6.2.6, [2] 6.2.7	M
8	Forbidden	[1] 6.2.6, [2] 6.2.7	M

Table 19: CSE OBEX Server Error Codes Reporting*Prerequisite: CTN 4/2 "CTN Notification Service"*

Item	OBEX Operation	Reference	Status
1	Bad Request	[1] 6.2.6, [2] 6.2.7	M
2	Not Implemented	[1] 6.2.6, [2] 6.2.7	M
3	Unauthorized	[1] 6.2.6, [2] 6.2.7	O
4	Precondition Failed	[1] 6.2.6, [2] 6.2.7	O
5	Not Found	[1] 6.2.6, [2] 6.2.7	O
6	Not Acceptable	[1] 6.2.6, [2] 6.2.7	O
7	Service Unavailable	[1] 6.2.6, [2] 6.2.7	O
8	Forbidden	[1] 6.2.6, [2] 6.2.7	O

3.3 SDP requirements

Table 20: SDP Requirements (CCE)

Prerequisite: CTN 1/1 “CTN Client Equipment”

Item	Feature	Reference	Status	Inter-Layer Dependency
1	ProtocolDescriptorList	[1] 7.3	M	[4] SDP 9/2
2	BluetoothProfileDescriptorList	[1] 7.3	M	[4] SDP 9/14
3	ServiceName	[1] 7.3	M	[4] SDP 9/9

Table 21: SDP Requirements (CSE)

Prerequisite: CTN 1/2 “CTN Server Equipment”

Item	Feature	Reference	Status	Inter-Layer Dependency
1	ProtocolDescriptorList	[1] 7.2	M	[4] SDP 9/2
2	BluetoothProfileDescriptorList	[1] 7.2	M	[4] SDP 9/14
3	ServiceName	[1] 7.2	M	[4] SDP 9/9

4 References

- [1] Bluetooth Calendar, Tasks and Notes Profile Specification, Version 1.0 or later
- [2] Bluetooth Profile Generic PIM Profile Specification, Version 1.0 or later
- [3] ICS Proforma for Generic Access Profile (GAP)
- [4] ICS Proforma for Service Discovery Protocol (SDP)

5 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2014-09-18	Approved by BoD
	1.0.1r00	2017-10-08	TSE 9955 (rating 1): Updated template. Removed General Statement of Conformance section. Removed table number fields. Fixed tables in Section 2 to conform to the current template conventions.
1	1.0.1	2018-07-01	Approved by BTI. Prepared for TCRL 2018-1 publication.
	1.0.1.0r00	2018-11-09	Updated version number to 1.0.1.0 to align with adoption of the specification 1.0.1. Added Table 0a and item 0a/1 for the new version.
2	1.0.1.0	2018-11-21	Approved by BTI. Prepared for TCRL 2018-2 publication.
	p3r00–r02	2023-10-12 – 2023-11-20	<p>TSE 19241 (rating 1): Made editorial edits to align the document with the latest ICS template, including updates to the IUT identification section, table titles, and spacing. Removed Support columns and “is supported” language. Updated C.1 for Tables 1 and 5. Updated the prerequisite for Tables 2–21. In Table 3, updated C.1–C.8. In Table 6, added an ILD column, deleted unnecessary headings within the table, updated the Reference and Status values for Item 1, added Item 1a, updated the Feature and Reference values for Item 2, and updated C.1. Marked Table 7 as no longer used. In Table 8, added an ILD column, deleted unnecessary headings within the table, marked Item 1 as no longer used, and updated the Reference value for Item 2. In Table 9, added an ILD column, updated the Reference value for Item 1, marked Item 2 as no longer used, updated the Reference and Status values for Item 3, and deleted C.1. Deleted an introductory statement for Section 2.2. In Table 10, updated the references and deleted C.1. In Table 11, updated the Reference values and updated C.1. In Tables 12, 13, 16, 17, and 19, updated the Reference values. In Tables 14 and 18, updated the Reference values and updated all values for Item 5. In Table 15, updated the Reference values and marked Item 6 as no longer used. In Tables 20 and 21, added an ILD column and updated the Reference values. Updated the references.</p> <p>Replaced the Bluetooth logo in the footer and updated the copyright page to align with the latest version of the DNMD. Created separate sections for Roles and Versions. Moved the revision history and acknowledgments to the end of the document. Added a Publication Number column to the Revision History. Revised the document numbering convention, setting the last release publication of 1.0.1.0 as p2.</p>

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3	p3	2024-07-01	Approved by BTI on 2024-05-22. Prepared for TCRL 2024-1 publication.
	p4r00	2025-02-24	TSE 26902 (rating 2): Added “Core Configuration” section and Table 0b. Updated 3/7 and 5/7. Applied current ICS template. Deleted draft revision history comments prior to p0.
4	p4	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.

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