

Device Time Profile (DTP)

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 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	Server	[1] 2.1	C.1
2	Client	[1] 2.1	C.1

C.1: Mandatory to support at least one.

2.2 Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Profile supported over BR/EDR	[1] 2.5	C.1, C.3
2	Profile supported over LE	[1] 2.5	C.2, C.3

C.1: Excluded for this Profile IF CORE 41/2 "LE Core Configuration" OR CORE 40/1 "Core-Controller".

C.2: Excluded for this Profile IF CORE 41/1 "BR/EDR Core Configuration" OR CORE 40/1 "Core-Controller".

C.3: Mandatory to support at least one.

2.3 Device Time Server role

Table 3: X.Y Versions (Server)

Prerequisite: DTP 1/1 "Server"

Item	Version	Reference	Status
1	DTP v1.0	[1]	M

Table 4: X.Y.Z Versions (Server)

Table number reserved but not yet in use

2.3.1 Service requirements

Table 5: Service Requirements

Prerequisite: DTP 1/1 "Server"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Device Time Service	[1] 3	M	[5] DTS

Table 6: No longer used



2.3.2 GAP requirements

Table 7: GAP Requirements

Prerequisite: DTP 1/1 “Server” AND DTP 2/2 “Profile supported over LE”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 2.4.1	M	[4] GAP 5/3
2–4	No longer used	N/A	N/A	N/A

2.4 Device Time Client role

Table 8: X.Y Versions (Client)

Prerequisite: DTP 1/2 “Client”

Item	Version	Reference	Status
1	DTP v1.0	[1]	M

Table 9: X.Y.Z Versions (Client)

Table number reserved but not yet in use

2.4.1 Service requirements

Table 10: Discovery of Service and Characteristics

Prerequisite: DTP 1/2 “Client”

Item	Capability	Reference	Status
1	No longer used	N/A	N/A
2	Discover Device Time Service	[1] 4, 4.2	M
3	Discover Device Time Service characteristics	[1] 4, 4.3.1	M
4	Discover Device Time Feature characteristic and Client Characteristic Configuration descriptor (CCCD)	[1] 4, 4.3.1.1	M
5	Discover Device Time Parameters characteristic and CCCD	[1] 4, 4.3.1.2	M
6	Discover Device Time characteristic and CCCD	[1] 4, 4.3.1.3	M
7	Discover DTCP characteristic and CCCD	[1] 4, 4.3.1.4	O
8	Discover RACP characteristic and CCCD	[1] 4, 4.3.1.6	O
9	Discover Time Change Log Data characteristic and CCCD	[1] 4, 4.3.1.5	C.1

C.1: Mandatory IF DTP 10/8 “Discover RACP characteristic and CCCD”, otherwise Excluded.



Table 11: Device Time Features*Prerequisite: DTP 1/2 “Client”*

Item	Capability	Reference	Status
1	E2E-CRC	[1] 4.5.2.1	M
2	Base Time Second-Fractions	[1] 4.5.2.3	O
3	Read DT Parameters characteristic	[1] 4.6	O
4	Configure and receive DT Parameters characteristic indications	[1] 4.6	O
5	Read DT characteristic	[1] 4.7	O
6	Configure and receive DT characteristic indications	[1] 4.7	O
7	Configure and receive DT Feature characteristic indications	[1] 4.5.2	O

Table 12: Device Time Control Point Procedures*Prerequisite: DTP 10/7 “Discover DTCP characteristic and CCCD”*

Item	Capability	Reference	Status
1	Propose Time Update	[1] 4.9.4	M
2	Force Time Update	[1] 4.9.5	O
3	Propose Non-Logged Time Adjustment Limit	[1] 4.9.7	O
4	Retrieve Active Time Adjustments	[1] 4.9.8	O

Table 13: Record Access Control Point Procedures*Prerequisite: DTP 10/8 “Discover RACP characteristic and CCCD”*

Item	Capability	Reference	Status
1	Combined Report	[1] 4.10.4.2	M
2	Report Stored Records	[1] 4.10.4.3	O
3	Report Number of Stored Records	[1] 4.10.4.4	M
4	Abort Operation	[1] 4.10.4.5	O

Table 14: RACP – Report Stored Records Operators*Prerequisite: DTP 13/2 “Report Stored Records”*

Item	Capability	Reference	Status
1	All records Operator	[1] 4.10.4 [2] 3.8.2	O
2	First record Operator	[1] 4.10.4 [2] 3.8.2	O
3	Last record Operator	[1] 4.10.4 [2] 3.8.2	O



Item	Capability	Reference	Status
4	Greater than or equal to Operator with Sequence Number Operand	[1] 4.10.4 [2] 3.8.2	O
5	Less than or equal to Operator with Sequence Number Operand	[1] 4.10.4 [2] 3.8.2	O
6	Within range of (inclusive) Operator with Sequence Number Operand	[1] 4.10.4 [2] 3.8.2	O

2.4.2 GATT requirements

Table 15: GATT Requirements

Prerequisite: DTP 1/2 “Client”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	GATT Client over LE	[1] 2.1	C.5	[3] GATT 1a/1
2a	GATT Client over BR/EDR	[1] 2.1	C.6	[3] GATT 1a/2
3	Discover All Primary Services	[1] 4.1	C.1	[3] GATT 3/2
4	Discover Primary Service by Service UUID	[1] 4.1	C.1	[3] GATT 3/3
5	Discover All Characteristics of a Service	[1] 4.1	C.2	[3] GATT 3/5
6	Discover Characteristics by UUID	[1] 4.1	C.2	[3] GATT 3/6
7	Discover All Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/7
8	Single Notification	[1] 4.1	C.3	[3] GATT 3/17
9	Indication	[1] 4.1	M	[3] GATT 3/18
10	Read Characteristic Value	[1] 4.1	M	[3] GATT 3/8
11	Write Characteristic Value	[1] 4.1	C.4	[3] GATT 3/14
12	Read Characteristic Descriptor	[1] 4.1	M	[3] GATT 3/19
13	Write Characteristic Descriptor	[1] 4.1	M	[3] GATT 3/21
14	Exchange MTU	[1] 4.1	C.3	[3] GATT 3/1

C.1: Mandatory to support at least one.

C.2: Mandatory to support at least one.

C.3: Mandatory IF DTP 10/8 “Discover RACP characteristic and CCCD”, otherwise Optional.

C.4: Mandatory IF DTP 10/7 “Discover DTCP characteristic and CCCD” OR DTP 10/8 “Discover RACP characteristic and CCCD”, otherwise Optional.

C.5: Mandatory IF DTP 2/2 “Profile supported over LE”, otherwise not defined.

C.6: Mandatory IF DTP 2/1 “Profile supported over BR/EDR”, otherwise not defined.

2.4.3 GAP requirements

Table 16: GAP Requirements

Prerequisite: DTP 1/2 "Client" AND DTP 2/2 "Profile supported over LE"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Central	[1] 2.4.1	M	[4] GAP 5/4
2	Bondable mode	[1] 5.2	O	[4] GAP 34/2
3	Bonding procedure	[1] 5.2	O	[4] GAP 34/3
4–5	No longer used	N/A	N/A	N/A

3 References

- [1] Device Time Profile Specification, Version 1.0
- [2] Device Time Service Specification, Version 1.0
- [3] ICS Proforma for Generic Attribute Profile (GATT)
- [4] ICS Proforma for Generic Access Profile (GAP)
- [5] ICS Proforma for Device Time Service (DTS)

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2020-12-22	Approved by BTI on 2020-12-02. DTS v1.0 adopted by the BoD on 2020-12-15. Prepared for publication.
	p1r00-r01	2023-09-21 – 2023-09-26	TSE 23949 (rating 2): Resolved GATT and GAP inter-layer dependencies. Made editorial edits to align the document with the latest ICS template, including updates to the Section 1 introduction; the titles of Tables 1, 3, 4, 8, and 9; and C.1 of Tables 1, 2, and 10. Marked Tables 6 (GATT Requirements) as no longer used. In Table 7, updated the prerequisite and the Status value for Item 1, marked Items 2–4 as no longer used, and deleted C.1–C.3. In Table 10, marked Item 1 as no longer used. In Table 15, marked Item 1 as no longer used; updated the Capability, Status, and ILD values for Item 2; added Item 2a; updated Items C.1, C.2, and C.4; and added C.5 and C.6. In Table 16, updated the prerequisite and the Status values for Items 1–3, marked Items 4 and 5 as no longer used, and deleted C.1–C.4. Removed “is supported” language. Updated the copyright page to align with v2 of the DNMD. Deleted draft revision history comments prior to p0.
1	p1	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p2r00-r01	2025-04-30 – 2025-05-06	TSE 27370 (rating 1): In Table 2, updated the Status value for DTP 2/1 and DTP 2/2, added conditions C.1 and C.2, and renumbered C.1 as C.3. Incorporated editorials to align the document with the latest ICS template, including updates to Section 1 and the addition of a section heading for the ICS declarations section.
2	p2	2025-07-08	Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication.
	p3r00	2025-07-17	TSE 27548 (rating 1): Updated ILD in DTP 7/1 and DTP 16/1.
3	p3	2025-11-04	Approved by BTI on 2025-10-02. Prepared for TCRL pkg101 publication.
	p4r00-r01	2025-12-04 – 2025-12-30	TSE 28169 (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.
4	p4	2026-02-17	Approved by BTI on 2026-01-21. Prepared for TCRL pkg102 publication.

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