Reconnection Configuration Service (RCS)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

- **Revision:** RCS.ICS.p3
- **Revision Date:** 2024-07-01
- **Prepared By:** Medical Devices Working Group
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Contents

1   Identification of the implementation

1.1   Implementation Under Test (IUT) identification

Identification of the Implementation Under Test (IUT) is to be filled in to provide as much detail as possible regarding version numbers and configuration options.

An ICS contact person to respond to queries regarding information supplied in this ICS proforma is named in the Declaration of Compliance: Summary of Selected Specifications in Implementation.

1.2   Versions

Table 0: X.Y Versions

Item	Version	Reference	Status
1	RCS 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. Deprecated 2023-02-01. Withdrawn 2025-02-01.

Table 0a: X.Y.Z Versions

Item	Version	Reference	Status
1	RCS v1.0.1	[4]	C.1

C.1:   Mandatory IF RCS 0/1 "RCS v1.0", otherwise Excluded.

Table 1: No longer used

1.3   Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over LE	[1] 1.6	M
2	Service supported over BR/EDR	[1] 1.6	C.1

C.1:   Excluded for this Service.

1.4   Reconnection Configuration Server

1.4.1   Service definition

Table 3: Reconnection Configuration Server, Service Definition

Item	Capability	Reference	Status
1	Reconnection Configuration Service	[1] 2.1	M

1.4.2   Reconnection Configuration features

Table 4: Reconnection Configuration Server, Reconnection Configuration Features

Item	Capability	Reference	Status
1	E2E-CRC	[1] 3.1.1.1, 3.1.1.2, 3.4	O
2	Enable Disconnect	[1] 3.1.1.2, 3.3.2.1	O
3	Ready for Disconnect	[1] 3.1.1.2, 3.2.2	O
4	Propose Advertisement Interval	[1] 3.1.1.2, 3.3.2.3	O

Item	Capability	Reference	Status
5	Propose Advertisement Count	[1] 3.1.1.2, 3.3.2.3	O
6	Propose Advertisement Repetition Time	[1] 3.1.1.2, 3.3.2.3	O
7	Propose Connection Interval	[1] 3.1.1.2, 3.3.2.3	O
8	Propose Peripheral Latency	[1] 3.1.1.2, 3.3.2.3	O
9	Propose Supervision Timeout	[1] 3.1.1.2, 3.3.2.3	O
10	Advertisement Configuration 1	[1] 3.1.1.2, 3.3.2.10	O
11	Advertisement Configuration 2	[1] 3.1.1.2, 3.3.2.10	O
12	Advertisement Configuration 3	[1] 3.1.1.2, 3.3.2.10	O
13	Advertisement Configuration 4	[1] 3.1.1.2, 3.3.2.10	O
14	Upgrade to LESC Only	[1] 3.1.1.2, 3.3.2.11	O
15	Next Pairing OOB	[1] 3.1.1.2, 3.3.2.12	O
16	Propose Reconnection Timeout	[1] 3.1.1.2, 3.3.2.3	O
17	Use of Filter Accept List	[1] 3.1.1.2, 3.3.2.8, 3.3.2.9	O
18	Limited Access	[1] 3.1.1.2, 3.3.2.13	O
19	Indications for changes of supported features	[4] 3	M

1.4.3   Service requirements

Table 5: Reconnection Configuration Server, Service Requirements

Item	Capability	Reference	Status
1	RC Feature	[1] 3, 3.1	M
2	RC Settings	[1] 3, 3.2	C.1
3	RC Settings Client Characteristic Descriptor	[1] 3	C.2
4	Reconnection Configuration Control Point (RCCP)	[1] 3, 3.3	C.3
5	RCCP Client Characteristic Descriptor	[1] 3	C.3
6	E2E-CRC Field	[1] 3.1, 3.1.1.1, 3.2.1, 3.3.1	C.4

C.1:   Mandatory IF RCS 4/3 "Ready for Disconnect" OR at least two of (RCS 4/10 "Advertisement Configuration 1" OR RCS 4/11 "Advertisement Configuration 2" OR RCS 4/12 "Advertisement Configuration 3" OR RCS 4/13 "Advertisement Configuration 4") OR RCS 4/14 "Upgrade to LESC Only" OR RCS 4/15 "Next Pairing OOB" OR RCS 4/18 "Limited Access", otherwise Excluded.

C.2:   Mandatory IF RCS 4/3 "Ready for Disconnect", otherwise Optional.

C.3:   Mandatory IF RCS 4/2 "Enable Disconnect" OR RCS 4/16 "Propose Reconnection Timeout" OR RCS 4/7 "Propose Connection Interval" OR RCS 4/8 "Propose Peripheral Latency" OR RCS 4/9 "Propose Supervision Timeout" OR RCS 4/4 "Propose Advertisement Interval" OR RCS 4/5 "Propose Advertisement Count" OR RCS 4/6 "Propose Advertisement Repetition Time" OR at least two of (RCS 4/10 "Advertisement Configuration 1" OR RCS 4/11 "Advertisement Configuration 2" OR RCS 4/12 "Advertisement Configuration 3" OR RCS 4/13 "Advertisement Configuration 4") OR RCS 4/14 "Upgrade to LESC Only" OR RCS 4/15 "Next Pairing OOB" OR RCS 4/17 "Use of Filter Accept List" OR RCS 4/18 "Limited Access", otherwise Excluded.

C.4:   Mandatory IF RCS 4/1 "E2E-CRC", otherwise Excluded.

Table 5a: Indications for changes of supported features

Prerequisite: RCS 4/19 "Indications for changes of supported features"

Item	Capability	Reference	Status
1	Changeable RC Feature	[4] 3	O
2	RC Feature characteristic indication	[4] 3	C.1

C.1:   Mandatory IF RCS 5a/1 "Changeable RC Feature", otherwise Excluded.

1.4.4   Reconnection Configuration Control Point (RCCP) procedures

Table 6: Reconnection Configuration Server, RCCP Procedures

Prerequisite: RCS 5/4 "Reconnection Configuration Control Point (RCCP)"

Item	Capability	Reference	Status
1	Enable Disconnect	[1] 3.3.1, 3.3.2.1	C.1
2	Get Actual Communication Parameters	[1] 3.3.1, 3.3.2.2	C.2
3	Propose Settings	[1] 3.3.1, 3.3.2.3	C.2
4	Activate Stored Settings	[1] 3.3.1, 3.3.2.4	C.2
5	Get Max Values and Communication Parameter Response	[1] 3.3.1, 3.3.2.5	C.3
6	Get Min Values and Communication Parameter Response	[1] 3.3.1, 3.3.2.6	C.3
7	Get Stored Values and Communication Parameter Response	[1] 3.3.1, 3.3.2.7	C.2
8	Set Filter Accept List Timer	[1] 3.3.1, 3.3.2.8	C.4
9	Get Filter Accept List Timer and Filter Accept List Timer Response	[1] 3.3.1, 3.3.2.9	C.4
10	Set Advertisement Configuration	[1] 3.3.1, 3.3.2.10	C.5
11	Upgrade to LESC Only	[1] 3.3.1, 3.3.2.11	C.6
12	Switch OOB Pairing	[1] 3.3.1, 3.3.2.12	C.7
13	Limited Access	[1] 3.3.1, 3.3.2.13	C.8

C.1:   Mandatory IF RCS 4/2 "Enable Disconnect", otherwise Excluded.

C.2:   Mandatory IF RCS 4/16 "Propose Reconnection Timeout" OR RCS 4/7 "Propose Connection Interval" OR RCS 4/8 "Propose Peripheral Latency" OR RCS 4/9 "Propose Supervision Timeout" OR RCS 4/4 "Propose Advertisement Interval" OR RCS 4/5 "Propose Advertisement Count" OR RCS 4/6 "Propose Advertisement Repetition Time", otherwise Excluded.

C.3:   Optional IF RCS 4/16 "Propose Reconnection Timeout" OR RCS 4/7 "Propose Connection Interval" OR RCS 4/8 "Propose Peripheral Latency" OR RCS 4/9 "Propose Supervision Timeout" OR RCS 4/4 "Propose Advertisement Interval" OR RCS 4/5 "Propose Advertisement Count" OR RCS 4/6 "Propose Advertisement Repetition Time", otherwise Excluded.

C.4:   Mandatory IF RCS 4/17 "Use of Filter Accept List", otherwise Excluded.

C.5:   Mandatory IF at least two of RCS 4/10 "Advertisement Configuration 1" OR RCS 4/11 "Advertisement Configuration 2" OR RCS 4/12 "Advertisement Configuration 3" OR RCS 4/13 "Advertisement Configuration 4", otherwise Excluded.

C.6:   Mandatory IF RCS 4/14 "Upgrade to LESC Only", otherwise Excluded.

C.7:   Mandatory IF RCS 4/15 "Next Pairing OOB", otherwise Excluded.

C.8:   Mandatory IF RCS 4/18 "Limited Access", otherwise Excluded.

1.4.5   GATT requirements

Table 7: Reconnection Configuration Server, GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Write Characteristic Value	[1] 1.5	M	[2] GATT 4/14
2	Notifications	[1] 1.5	C.2	[2] GATT 4/17
3	Indications	[1] 1.5	C.1	[2] GATT 4/18
4	Read Characteristic Descriptors	[1] 1.5	M	[2] GATT 4/19
5	Write Characteristic Descriptors	[1] 1.5	M	[2] GATT 4/21
6	GATT Server over LE	[1] 1.5	M	[2] GATT 1a/3

C.1:   Mandatory IF RCS 5/4 "Reconnection Configuration Control Point (RCCP)", otherwise not defined.

C.2:   Mandatory IF RCS 4/3 "Ready for Disconnect", otherwise Optional.

1.4.6   GAP requirements

Table 8: Reconnection Configuration Server, GAP Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Connection parameter update procedure	[1] 3.3.2.4	C.1	[3] GAP 23/4
2	Peripheral	[1]	M	[3] GAP 5/3 OR GAP 38/3
3	Out of Band	[1] 2.2.1	C.2	[3] GAP 27b/9
4	LE security mode 1 level 4	[1] 2.2.1, 3.3.2.11	C.3	[3] GAP 25/9
5	Secure Connections Only mode	[1] 2.2.1, 3.3.2.11	C.3	[3] GAP 25/10

C.1:   Mandatory IF RCS 4/7 "Propose Connection Interval" OR RCS 4/8 "Propose Peripheral Latency" OR RCS 4/9 "Propose Supervision Timeout", otherwise not defined.

C.2:   Mandatory IF RCS 4/15 "Next Pairing OOB", otherwise not defined.

C.3:   Mandatory IF RCS 4/14 "Upgrade to LESC Only", otherwise not defined.

Table 9: No longer used

2 References

[1] Reconnection Configuration Service Specification, Version 1.0 or later

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

[3] ICS Proforma for Generic Access Profile (GAP)

[4] Reconnection Configuration Service Specification, Version 1.0.1

3 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2017-12-05	Adopted by the Bluetooth SIG Board of Directors.
	p1r00–r09	2021-02-21 – 2021-12-23	TSE 16859 (rating 4): Updated C.1 in Table 0. Added new Table 0a, new items RCS 4/19, and new Table 5a. Added reference for RCS Specification v1.0.1. TSE 18080 (rating 1): Changes from E15809. Replaced text in the capability descriptions of 4/8, 4/17, 6/8, 6/9, and any associated affected conditionals with the Appropriate Language updates. TSE 18081 (rating 2): Updated C.1 in Table 7 to refer to RCS 5/4 (simplification) as the earlier conditional listed all RCCP procedures. TSE 18144 (rating 1): Updated RCS 3/1 capability to read "Reconnection Configuration Service". Performed editorial work, including updating to the latest ICS template and aligning the copyright page with v2 of the DNMD.
1	p1	2022-01-25	Approved by BTI on 2022-01-06. Prepared for TCRL 2021-2 publication.
	p2r00	2022-02-28	TSE 18168 (rating 2): Updated C.1 and C.3 of Table 5 and C.5 of Table 6 to address Erratum 15852. Editorials to correct "is/not supported" language to align with the latest conventions.
2	p2	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.
	p3r00–r02	2023-10-09 – 2023-12-06	TSE 23353 (rating 2): Resolved GATT and SDP inter-layer dependencies. In Tables 0 and 0a, updated C.1. Marked Tables 1 and 9 as no longer used. Deleted the prerequisite from Tables 3, 4, and 5. Also in Table 4, updated the Status value for Item 19 and deleted C.1. In Table 7, deleted the prerequisite and added Item 6. In Table 8, deleted the prerequisite and added Items 2–5, C.2, and C.3. Updated the references. Made editorial edits to align the document with the latest ICS template, including updates to table titles and spacing and the removal of "is supported" language in conditionals. 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.

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