

# Reconnection Configuration Service (RCS)

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

---

- **Revision:** RCS.ICS.p3 edition 2
- **Revision Date:** 2025-08-05
- **Prepared By:** Medical Devices Working Group
- **Published during TCRL:** TCRL.2024-1



This document, regardless of its title or content, is not a Bluetooth Specification as defined in the Bluetooth Patent/Copyright License Agreement (“PCLA”) and Bluetooth Trademark License Agreement. Use of this document by members of Bluetooth SIG is governed by the membership and other related agreements between Bluetooth SIG Inc. (“Bluetooth SIG”) and its members, including the PCLA and other agreements posted on Bluetooth SIG’s website located at [www.bluetooth.com](http://www.bluetooth.com).

THIS DOCUMENT IS PROVIDED “AS IS” AND BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES MAKE NO REPRESENTATIONS OR WARRANTIES AND DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, THAT THE CONTENT OF THIS DOCUMENT IS FREE OF ERRORS.

TO THE EXTENT NOT PROHIBITED BY LAW, BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES DISCLAIM ALL LIABILITY ARISING OUT OF OR RELATING TO USE OF THIS DOCUMENT AND ANY INFORMATION CONTAINED IN THIS DOCUMENT, INCLUDING LOST REVENUE, PROFITS, DATA OR PROGRAMS, OR BUSINESS INTERRUPTION, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, AND EVEN IF BLUETOOTH SIG, ITS MEMBERS, OR THEIR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This document is proprietary to Bluetooth SIG. This document may contain or cover subject matter that is intellectual property of Bluetooth SIG and its members. The furnishing of this document does not grant any license to any intellectual property of Bluetooth SIG or its members.

This document is subject to change without notice.

Copyright © 2016–2025 by Bluetooth SIG, Inc. The Bluetooth word mark and logos are owned by Bluetooth SIG, Inc. Other third-party brands and names are the property of their respective owners.

## Contents

<b>1</b>	<b>General principles .....</b>	<b>4</b>
1.1	Implementation Under Test (IUT) identification .....	4
1.2	Enforcement of inter-layer dependencies .....	4
<b>2</b>	<b>ICS declarations.....</b>	<b>5</b>
2.1	Versions .....	5
2.2	Transports.....	5
2.3	Reconnection Configuration Server.....	5
2.3.1	Service definition.....	5
2.3.2	Reconnection Configuration features.....	5
2.3.3	Service requirements .....	6
2.3.4	Reconnection Configuration Control Point (RCCP) procedures.....	7
2.3.5	GATT requirements .....	8
2.3.6	GAP requirements .....	8
<b>3</b>	<b>References .....</b>	<b>9</b>
<b>4</b>	<b>Revision history and acknowledgments .....</b>	<b>10</b>

# 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	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 or Withdrawal. 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**

### 2.2 Transports

**Table 2: Transport Requirements**

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

C.1: Excluded for this Service.

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

C.3: Mandatory for this Service.

### 2.3 Reconnection Configuration Server

#### 2.3.1 Service definition

**Table 3: Reconnection Configuration Server, Service Definition**

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

#### 2.3.2 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

Item	Capability	Reference	Status
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
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

### 2.3.3 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.

### 2.3.4 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.

### 2.3.5 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	Single Notification	[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.

### 2.3.6 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**



## 3 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

## 4 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	<p>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.</p> <p>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.</p> <p>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.</p> <p>TSE 18144 (rating 1): Updated RCS 3/1 capability to read “Reconnection Configuration Service”.</p> <p>Performed editorial work, including updating to the latest ICS template and aligning the copyright page with v2 of the DNMD.</p>
1	p1	2022-01-25	Approved by BTI on 2022-01-06. Prepared for TCRL 2021-2 publication.
	p2r00	2022-02-28	<p>TSE 18168 (rating 2): Updated C.1 and C.3 of Table 5 and C.5 of Table 6 to address Erratum 15852.</p> <p>Editorials to correct “is/not supported” language to align with the latest conventions.</p>
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	<p>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.</p> <p>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.</p>
3	p3	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p3ed2r00	2025-07-11	TSE 27303 (rating 1): Updated the language in C.2 of Table 0. Updated the Status for RCS 2/1 and added conditions C.2 and C.3. Updated the Capability in RCS 7/2.
	p3 edition 2	2025-08-05	Approved by BTI on 2025-08-05. Prepared for edition 2 publication.

**Acknowledgments**

<b>Name</b>	<b>Company</b>
Jörg Brakensiek	Bluetooth SIG, Inc.
Ismail Mohamud	Bluetooth SIG, Inc.
Alicia Courtney	Broadcom
Wolfgang Heck	F.Hoffmann-La Roche AG
Magnus Sommansson	Qualcomm Technologies International Inc.