

Generic Health Sensor Service (GHSS)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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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	GHSS v1.0	[1]	M

Table 1: X.Y.Z Versions

Table number reserved but not yet in use.

1.3 Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 2.3	C.1
2	Service supported over LE	[1] 2.3	C.1

C.1: Mandatory to support at least one.

1.4 Features

Table 3: Health Sensor Features

Item	Capability	Reference	Status
1	Changeable Health Sensor Features	[1] 3, 3.1.2	O
2	Report live observations	[1] 2.7, 3.2.2.2	C.1
3	Report temporarily stored observations	[1] 2.7, 3.2.2.2	C.1
4	Report stored observations	[1] 2.7, 3.2.2.2	C.1
5	Server Supports Connections to Multiple Clients	[1] 3.1.2	O
6	Changeable Observation Schedule descriptor	[1] 3, 3.6	O

C.1: Mandatory to support at least one.

1.5 Service Requirements

1.5.1 Generic Health Sensor Service

Table 4: Generic Health Sensor Service

Item	Capability	Reference	Status
1	Health Sensor Features characteristic	[1] 3, 3.1	O
2	Supported Device Specializations field	[1] 3, 3.1.1	C.1
3	Health Sensor Features characteristic with indicate	[1] 3, 3.1.2	C.2
4	Observation Schedule descriptor	[1] 3, 3.7	O
5	Observation Schedule descriptor with write	[1] 3, 3.7	C.3
6	Valid Range and Accuracy descriptor	[1] 3, 3.7	O
7	Live Health Observations characteristic	[1] 3, 3.2	C.4

Item	Capability	Reference	Status
8	Live Health Observations characteristic with indicate	[1] 3, 3.2	C.5
9	Live Health Observations characteristic with notify	[1] 3, 3.2	C.5
10	Stored Health Observations characteristic	[1] 3, 3.3	C.6
11	RACP characteristic	[1] 3, 3.4	C.6
12	GHS Control Point characteristic	[1] 3, 3.5	C.4
13	Observation Schedule Changed characteristic	[1] 3, 3.6	C.7
14	Observation Schedule descriptor is settable via UI	[1] 3.6	C.3
15	Health Feature characteristic has a size beyond (ATT_MTU – 3)	[1] 3, 3.1	C.1
16	Simultaneous enabling of indications and notifications of the Live Health Observations characteristic	[1] 2.7, 3	C.8
17	Simultaneous enabling of indications and notifications of the Stored Health Observations characteristic	[1] 2.7, 3	C.9
18	Stored Health Observations characteristic with indicate	[1] 3, 3.3	C.10
19	Stored Health Observations characteristic with notify	[1] 3, 3.3	C.10

- C.1: Optional IF GHSS 4/1 “Health Sensor Features characteristic”, otherwise Excluded.
- C.2: Mandatory IF GHSS 3/1 “Changeable Health Sensor Features”, otherwise Excluded.
- C.3: Optional IF GHSS 3/6 “Changeable Observation Schedule descriptor” AND GHSS 4/4 “Observation Schedule descriptor”, otherwise Excluded.
- C.4: Mandatory IF GHSS 3/2 “Report live observations” OR GHSS 3/3 “Report temporarily stored observations”, otherwise Excluded.
- C.5: Mandatory to support at least one IF GHSS 4/7 “Live Health Observations characteristic”, otherwise Excluded.
- C.6: Mandatory IF GHSS 3/4 “Report stored observations”, otherwise Excluded.
- C.7: Mandatory IF GHSS 3/6 “Changeable Observation Schedule descriptor”, otherwise Excluded.
- C.8: Optional IF GHSS 4/7 “Live Health Observations characteristic”, otherwise Excluded.
- C.9: Optional IF GHSS 4/10 “Stored Health Observations characteristic”, otherwise Excluded.
- C.10: Mandatory to support at least one IF GHSS 4/10 “Stored Health Observations characteristic”, otherwise Excluded.

Table 5: Health Observation Body

Item	Capability	Reference	Status
1	Observation Type	[1] 3.2.1.5	M
2	Able to generate observation with Time Stamp present	[1] 3.2.1.6	C.1
3	Able to generate observation with Measurement Duration	[1] 3.2.1.7	O
4	Able to generate observation with Measurement Status	[1] 3.2.1.8	O
5	Able to generate observation with Observation Id	[1] 3.2.1.9	O
6	Able to generate observation with Patient	[1] 3.2.1.10	O
7	Able to generate observation with Supplemental Information	[1] 3.2.1.11	O
8	Able to generate observation with Derived From	[1] 3.2.1.12	O
9	Able to generate observation with Is Member Of	[1] 3.2.1.13	O
10	Able to generate observation with TLVs	[1] 3.2.1.14	O

Item	Capability	Reference	Status
11	Observation Value	[1] 3.2.1.15	M

C.1: Mandatory IF GHSS 3/3 “Report temporarily stored observations” OR GHSS 3/4 “Report stored observations”, otherwise Optional.

Table 6: Observation values

Item	Capability	Reference	Status
1	Able to generate Numeric observation value	[1] 3.2.1.15.1	C.1
2	Able to generate Simple discrete observation value	[1] 3.2.1.15.2	C.1
3	Able to generate String observation value	[1] 3.2.1.15.3	C.1
4	Able to generate Sample array observation value	[1] 3.2.1.15.4	C.1
5	Able to generate Compound observation value	[1] 3.2.1.15.7	C.1
6	Able to generate Compound Discrete Event observation value	[1] 3.2.1.15.5	C.1
7	Able to generate Compound State/Event observation (bit string) value	[1] 3.2.1.15.6	C.1
8	Able to generate TLV-encoded observation value	[1] 3.2.1.15.8	C.1
9	Able to generate Observation bundle value	[1] 3.2.1.15.9	C.1

C.1: Mandatory to support at least one.

Table 7: Record Access Control Point

Prerequisite: GHSS 4/11 “RACP characteristic”

Item	Capability	Reference	Status
1	Combined Report	[1] 3.4.3.1	M
2	Report Number of Stored Records	[1] 3.4.3.2	M
3	Delete Stored Records	[1] 3.4.3.3	O
4	Abort Operation	[1] 3.4.3.4	O

1.6 GATT Requirements

Table 8: GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1a	GATT Server over LE	[1] 2.5	C.7	[2] GATT 1a/3
1b	GATT Server over BR/EDR	[1] 2.5	C.6	[2] GATT 1a/4
2	Exchange MTU	[1] 2.5	C.1	[2] GATT 4/1
3	Read Long Characteristic Values	[1] 2.5	C.2	[2] GATT 4/10
4	Notifications	[1] 2.5	C.3	[2] GATT 4/17
5	Indications	[1] 2.5	C.4	[2] GATT 4/18
6	Read Characteristic Descriptors	[1] 2.5	M	[2] GATT 4/19
7	Write Characteristic Descriptors	[1] 2.5	M	[2] GATT 4/21

Item	Capability	Reference	Status	Inter-Layer Dependency
8	Write Characteristic Value	[1] 2.5	C.5	[2] GATT 4/14

C.1: Mandatory IF GHSS 2/2 “Service supported over LE”, otherwise not defined.

C.2: Mandatory IF GHSS 4/15 “Health Feature characteristic has a size beyond (ATT_MTU – 3)”, otherwise not defined.

C.3: Mandatory IF GHSS 4/9 “Live Health Observations characteristic with notify” OR GHSS 4/19 “Stored Health Observations characteristic with notify”, otherwise not defined.

C.4: Mandatory IF GHSS 4/3 “Health Sensor Features characteristic with indicate” OR GHSS 4/8 “Live Health Observations characteristic with indicate” OR GHSS 4/18 “Stored Health Observations characteristic with indicate” OR GHSS 4/11 “RACP characteristic” OR GHSS 4/13 “Observation Schedule Changed characteristic”, otherwise not defined.

C.5: Mandatory IF GHSS 4/11 “RACP characteristic” OR GHSS 4/12 “GHS Control Point characteristic”, otherwise not defined.

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

C.7: Mandatory IF GHSS 2/2 “Service supported over LE”, otherwise not defined.

1.7 GAP Requirements

Table 9: GAP Requirements

Prerequisite: GHSS 2/2 “Service supported over LE”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Bondable mode	[1] 3.1.2	C.1	[3] GAP 24/2
2	Bonding procedure	[1] 3.1.2	O	[3] GAP 24/3

C.1: Mandatory IF GHSS 9/2 “Bonding procedure”, otherwise not defined.

1.8 SDP Requirements

Table 10: SDP Requirements

Prerequisite: GHSS 2/1 “Service supported over BR/EDR”

Item	Capability	Reference	Status
1	SDP record present for GHSS	[1] 4	M

2 References

- [1] Generic Health Sensor Service Specification, Version 1.0
- [2] ICS Proforma for Generic Attribute Profile (GATT)
- [3] ICS Proforma for Generic Access Profile (GAP)

3 Revision history and acknowledgments

Revision History

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0	p0	2023-06-13	Approved by BTI on 2023-06-07. GHSS v1.0 adopted by the BoD on 2023-06-13. Prepared for initial publication.

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