Weight Scale Service (WSS)

***Bluetooth*® Test Suite**

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Contents

1 Scope

This Bluetooth document contains the Test Suite Structure (TSS) and test cases to test the implementation of the Bluetooth Weight Scale Service Specification with the objective to provide a high probability of air interface interoperability between the tested implementation and other manufacturers' Bluetooth devices.

2 References, definitions, and abbreviations

2.1 References

This document incorporates provisions from other publications by dated or undated reference. These references are cited at the appropriate places in the text, and the publications are listed hereinafter. Additional definitions and abbreviations can be found in [1] and [2].

[1] Test Strategy and Terminology Overview

[2] Bluetooth Core Specification, Version 4.0 or later

[3] Weight Scale Service Specification, Version 1.0 or later

[4] ICS Proforma for Weight Scale Service, WSS.ICS

[5] GATT Test Suite, GATT.TS

[6] Weight Scale Service Specification, Version 1.0.1

2.2 Documents

In this Bluetooth document, the definitions from [1] and [2] apply.

2.3 Acronyms and abbreviations

In this Bluetooth document, the definitions, acronyms, and abbreviations from [1] and [2] apply.

3 Test Suite Structure (TSS)

3.1 Overview

The Weight Scale Service requires the presence of GAP, SM (LE), SDP (BR/EDR), and GATT. This is illustrated in Figure 3.1.

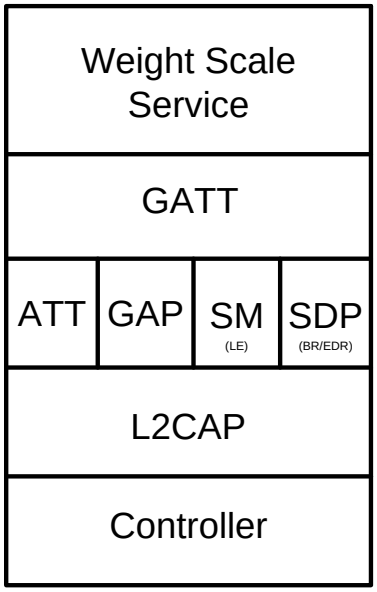

Figure 3.1: Weight Scale Service test model

3.2 Test Strategy

The test objectives are to verify functionality of the Weight Scale Service within a Bluetooth Host and enable interoperability between Bluetooth Hosts on different devices. The testing approach covers mandatory and optional requirements in the specification and matches these to the support of the IUT as described in the ICS. Any defined test herein is applicable to the IUT if the ICS logical expression defined in the Test Case Mapping Table (TCMT) evaluates to true.

The test equipment provides an implementation of the Radio Controller and the parts of the Host needed to perform the test cases defined in this Test Suite. A Lower Tester acts as the IUT's peer device and interacts with the IUT over-the-air interface. The configuration, including the IUT, needs to implement similar capabilities to communicate with the test equipment. For some test cases, it is necessary to stimulate the IUT from an Upper Tester. In practice, this could be implemented as a special test interface, a Man Machine Interface (MMI), or another interface supported by the IUT.

The Test Suite contains Valid Behavior (BV) tests complemented with Invalid Behavior (BI) tests where required. The test coverage mirrored in the Test Suite Structure is the result of a process that started with catalogued specification requirements that were logically grouped and assessed for testability enabling coverage in defined test cases.

3.3 Test groups

The following test groups have been defined:

- Generic GATT Integrated Tests
- Characteristic Read

- Configure Indication
- Characteristic Indication

4 Test cases (TC)

4.1 Introduction

4.1.1 Test case identification conventions

Test cases are assigned unique identifiers per the conventions in [1]. The convention used here is:
<spec abbreviation>/<IUT role>/<class>/**<feat>**/<func>/<subfunc>**/**<cap>**/<xx>-<nn>-<y>**.

Additionally, testing of this specification includes tests from the GATT Test Suite [5] referred to as Generic GATT Integrated Tests (GGIT); when used, the GGIT tests are referred to through a TCID string using the following convention:
<spec abbreviation>/<IUT role>/<GGIT test group>/< GGIT class >/<xx>-<nn>-<y>.

Identifier Abbreviation	**Spec Identifier <spec abbreviation>**
WSS	Weight Scale Service
Identifier Abbreviation	**Role Identifier <IUT role>**
SEN	Sensor Role
Identifier Abbreviation	**Reference Identifier <GGIT test group>**
SGGIT	Server Generic GATT Integrated Tests
Identifier Abbreviation	**Reference Identifier <GGIT class>**
CHA	Characteristic
ISFC	Indication Supported Features Characteristic
SDP	Validate SDP Record
SER	Service
Identifier Abbreviation	**Feature Identifier <feat>**
CI	Characteristic Indication
CON	Configure Indications
CR	Characteristic Read

Table 4.1: Weight Scale Service TC feature naming convention

4.1.2 Conformance

When conformance is claimed for a particular specification, all capabilities are to be supported in the specified manner. The mandated tests from this Test Suite depend on the capabilities to which conformance is claimed.

The Bluetooth Qualification Program may employ tests to verify implementation robustness. The level of implementation robustness that is verified varies from one specification to another and may be revised for cause based on interoperability issues found in the market.

Such tests may verify:

- That claimed capabilities may be used in any order and any number of repetitions not excluded by the specification
- That capabilities enabled by the implementations are sustained over durations expected by the use case
- That the implementation gracefully handles any quantity of data expected by the use case

- That in cases where more than one valid interpretation of the specification exists, the implementation complies with at least one interpretation and gracefully handles other interpretations
- That the implementation is immune to attempted security exploits

A single execution of each of the required tests is required to constitute a Pass verdict. However, it is noted that to provide a foundation for interoperability, it is necessary that a qualified implementation consistently and repeatedly pass any of the applicable tests.

In any case, where a member finds an issue with the test plan generated by the Bluetooth SIG qualification tool, with the test case as described in the Test Suite, or with the test system utilized, the member is required to notify the responsible party via an erratum request such that the issue may be addressed.

4.1.3 Pass/Fail verdict conventions

Each test case has an Expected Outcome section. The IUT is granted the Pass verdict when all the detailed pass criteria conditions within the Expected Outcome section are met.

The convention in this Test Suite is that, unless there is a specific set of fail conditions outlined in the test case, the IUT fails the test case as soon as one of the pass criteria conditions cannot be met. If this occurs, the outcome of the test is a Fail verdict.

4.2 Setup preambles

The procedures defined in this section are provided for information, as they are used by test equipment in achieving the initial conditions in certain tests.

4.2.1 ATT Bearer on LE Transport

- Preamble Procedure

1. Establish an LE transport connection between the IUT and the Lower Tester.
2. Establish an L2CAP channel 0x0004 between the IUT and the Lower Tester over that LE transport.

4.2.2 ATT Bearer on BR/EDR Transport

- Preamble Procedure

1. Establish a BR/EDR transport connection between the IUT and the Lower Tester.
2. Establish several L2CAP channels (PSM 0x001F) between the IUT and the Lower Tester over that BR/EDR transport.

4.3 Generic GATT Integrated Tests

Execute the Generic GATT Integrated Tests defined in Section 6.3, Server test procedures, in [5] using Table 4.2 below as input:

TCID	Service / Characteristic / Descriptor	Reference	Properties	Value Length (Octets)	Service Type
WSS/SEN/SGGIT/SER/BV-01-C [Service GGIT – Weight Scale]	Weight Scale Service	[3] 2	-	-	Primary or Secondary Service
WSS/SEN/SGGIT/SDP/BV-01-C [SDP Record]	Weight Scale Service	[3] 2, 4	-	-	-
WSS/SEN/SGGIT/CHA/BV-01-C [Characteristic GGIT – Weight Scale Feature]	Weight Scale Feature Characteristic	[3] 3	0x02 (Read)	Skip	-
WSS/SEN/SGGIT/CHA/BV-02-C [Characteristic GGIT – Weight Measurement]	Weight Measurement Characteristic	[3] 3	0x20 (Indicate)	Skip	-
WSS/SEN/SGGIT/CHA/BV-03-C [Characteristic GGIT – Weight Scale Feature – Indicate]	Weight Scale Feature Characteristic	[6] 3, 3.1.1	0x22 (Read, Indicate)	Skip	-

Table 4.2: Input for the GGIT Server Test Procedure

4.3.1 Generic GATT Indication Supported Features Characteristic

Execute the Generic GATT Indication Supported Features Characteristic Tests defined in Section 6.3, Server test procedures, in [5] using Table 4.4 below as input:

TCID	Characteristic	Reference	TC Configuration
WSS/SEN/SGGIT/ISFC/BV-01-C [Characteristic GGIT – Weight Scale Feature Indication]	Weight Scale Feature Characteristic	[6] 3.1.1	N/A

Table 4.3: Input for the GGIT Indication Supported Features Characteristic tests

4.4 Characteristic Read

- Test Purpose

  This test group contains test cases to read and verify that the characteristic values required by the service are compliant. The verification is done one value at a time, as enumerated in the test cases in Table 4.4, using this generic test procedure.

- Reference

  [3] 3.1.1, 3.3.1

- Initial Condition

  - The handle range of each characteristic referenced in the test cases below has been previously discovered by the Lower Tester during the test procedure in Section 4.3 or is known to the Lower Tester by other means.
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
  - If IUT permissions for the characteristic require a specific security mode or security level, establish a connection meeting those requirements.

- Test Case Configuration

Test Case	Requirements
WSS/SEN/CR/BV-01-C [Characteristic Read – Weight Scale Feature]	2 octets with RFU bits set to 0. ([3] 3.1.1)

Table 4.4: Characteristic Read Value test cases

- Test Procedure

  1. The Lower Tester sends an ATT_Read_Request to the IUT to read the characteristic value.
  2. The IUT sends an ATT_Read_Response to the Lower Tester.
  3. Verify that the characteristic value meets the requirements of the service.

- Expected Outcome

  Pass verdict

  The characteristic is successfully read, and the characteristic value meets the requirements of the service.

4.5 Configure Indication

- Test Purpose

  This test group contains test cases to verify compliant operation in response to enable and disable characteristic indication. The verification is done one value at a time, as enumerated in the test cases in Table 4.5, using this generic test procedure.

- Reference

  [3] 3.2

- Initial Condition
  - The handle range of each characteristic referenced in the test cases below has been previously discovered by the Lower Tester during the test procedure in Section 4.3 or is known to the Lower Tester by other means.
  - The handle of the Client Characteristic Configuration descriptor of each characteristic referenced in the test cases below has been previously discovered by the Lower Tester during the test procedure in Section 4.3 or is known to the Lower Tester by other means.
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
  - If IUT permissions for the characteristic require a specific security mode or security level, establish a connection meeting those requirements.
- Test Case Configuration

Test Case	Requirements
WSS/SEN/CON/BV-01-C [Configure Indication - Weight Measurement]	0x0002 ([3] 3.2)

Table 4.5: Configure Indication test cases

- Test Procedure
  1. Disable indication by writing value 0x0000 to the client characteristic configuration descriptor of the characteristic.
  2. Enable indication by writing value 0x0002 to the client characteristic configuration descriptor of the characteristic.
  3. The Lower Tester reads the value of the client characteristic configuration descriptor.
- Expected Outcome

  Pass verdict

  The characteristic descriptor is successfully written, and the value returned when read is consistent with the value written.

4.6 Characteristic Indication

Verify compliant operation when the IUT sends indications of characteristic values.

WSS/SEN/CI/BV-01-C [Weight Measurement Indications]

- Test Purpose

  Verify that the IUT can send an indication of the Weight Measurement characteristic that includes the mandatory fields (i.e., the Flags field and the Weight field).
- Reference

  [3] 3.2

- Initial Condition
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - If the IUT requires the use of consent, the Lower Tester registers a new user and retains the chosen consent code and the assigned User ID.
  - The Weight Measurement characteristic is configured for indication.
  - The Lower Tester has read and cached the value of the Weight Scale Feature characteristic.
  - Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
  - If IUT permissions for the Weight Measurement characteristic require a specific security mode or security level, establish a connection meeting those requirements.
- Test Procedure
  1. Perform an action on the IUT that will induce it to send an indication of the Weight Measurement characteristic along with the Flags field and the Weight field (i.e., the IUT advertises). The IUT and Lower Tester connect.
  2. If the devices were not bonded, the Lower Tester configures the Weight Measurement characteristic for indication.
  3. The Lower Tester receives one ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic handle and value along with the Flags field and the Weight field.
  4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
  5. Verify that the characteristic value meets the requirements of the service.
  6. The Lower Tester configures the Weight Measurement characteristic to disable indications.
  7. Perform an action on the IUT that will generate a new Weight measurement.
  8. Verify that the Lower Tester does not receive an ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic.
- Expected Outcome

  Pass verdict

  The IUT sends one indication of the Weight Measurement characteristic, and it includes at least the Flags field and the Weight field.

  The value of each field of the characteristic meets the requirements of the service.

  The IUT stops sending indications of the Weight Measurement characteristic after the Lower Tester configures the characteristic to disable indications.

  The RFU bits of the Flags field are set to zero.

WSS/SEN/CI/BV-02-C [Weight Measurement Indications – Time Stamp]

- Test Purpose

  Verify that the IUT can send an indication of the Weight Measurement characteristic that includes the Time Stamp field.
- Reference

  [3] 3.2.1.3

- Initial Condition
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - If the IUT requires the use of consent, the Lower Tester registers a new user and retains the chosen consent code and the assigned User ID.
  - The Weight Measurement characteristic is configured for indication.
  - The Lower Tester has read and cached the value of the Weight Scale Feature characteristic.
  - Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
  - If IUT permissions for the Weight Measurement characteristic require a specific security mode or security level, establish a connection meeting those requirements.
- Test Procedure
  1. Perform an action on the IUT that will induce it to send an indication of the Weight Measurement characteristic along with the Time Stamp field (i.e., the IUT advertises). The IUT and Lower Tester connect.
  2. If the devices were not bonded, the Lower Tester configures the Weight Measurement characteristic for indication.
  3. The Lower Tester receives one ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic handle and value along with the Time Stamp field.
  4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
  5. Verify that the characteristic value meets the requirements of the service.
- Expected Outcome

  Pass verdict

  The IUT sends one indication of the Weight Measurement characteristic, and it includes the Time Stamp field with the appropriate flag set in the Flags field.

  The value of each field of the characteristic meets the requirements of the service.

  The value of the Time Stamp Supported bit of the cached Weight Scale Feature characteristic is set to 1.

  The RFU bits of the Flags field are set to zero.

WSS/SEN/CI/BV-03-C [Weight Measurement Indications – User ID]

- Test Purpose

  Verify that the IUT can send an indication of the Weight Measurement characteristic that includes the User ID field.
- Reference

  [3] 3.2.1.4
- Initial Condition
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - If the IUT requires the use of consent, the Lower Tester registers a new user and retains the chosen consent code and the assigned User ID.
  - The Weight Measurement characteristic is configured for indication.

- The Lower Tester has read and cached the value of the Weight Scale Feature characteristic.
- Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
- The IUT has previously been configured for at least two users and Lower Tester has been assigned only one User ID at initial connection with the IUT.
- If IUT permissions for the Weight Measurement characteristic require a specific security mode or security level, establish a connection meeting those requirements.

- Test Procedure

  1. Perform an action on the IUT that will induce it to send an indication of the Weight Measurement characteristic along with the User ID field (i.e., the IUT advertises). The IUT and Lower Tester connect.
  2. If the devices were not bonded, the Lower Tester configures the Weight Measurement characteristic for indication.
  3. The Lower Tester receives one ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic handle and value along with the User ID field and appropriate User ID value.
  4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
  5. Verify that the characteristic value meets the requirements of the service.
  6. Perform an action on the IUT that will induce it to send an indication of the Weight Measurement characteristic that is not designated for the user assigned to the Lower Tester (i.e., the IUT advertises).

- Expected Outcome

  Pass verdict

  The IUT sends one indication of the Weight Measurement characteristic, and it includes the User ID field with the appropriate flag set in the Flags field.

  The value of each field of the characteristic meets the requirements of the service.

  The value of the User ID field is consistent with the value assigned to the Lower Tester at initial configuration.

  The Lower Tester does not receive the second measurement for the user to which it is not associated.

  The value of the Multiple Users Supported bit of the cached Weight Scale Feature characteristic is set to 1.

  The RFU bits of the Flags field are set to zero.

WSS/SEN/CI/BV-04-C [Weight Measurement Indications – BMI]

- Test Purpose

  Verify that the IUT can send an indication of the Weight Measurement characteristic that includes the BMI and Height fields.

- Reference

  [3] 3.2.1.5

- Initial Condition
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - If the IUT requires the use of consent, the Lower Tester registers a new user and retains the chosen consent code and the assigned User ID.
  - The Weight Measurement characteristic is configured for indication.
  - The Lower Tester has read and cached the value of the Weight Scale Feature characteristic.
  - Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
  - If IUT permissions for the Weight Measurement characteristic require a specific security mode or security level, establish a connection meeting those requirements.
- Test Procedure
  1. Perform an action on the IUT that will induce it to send an indication of the Weight Measurement characteristic along with BMI and Height fields (i.e., the IUT advertises). The IUT and Lower Tester connect.
  2. If the devices were not bonded, the Lower Tester configures the Weight Measurement characteristic for indication.
  3. The Lower Tester receives one ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic handle and value along with the BMI and Height fields.
  4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
  5. Verify that the characteristic value meets the requirements of the service.
- Expected Outcome

  Pass verdict

  The IUT sends one indication of the Weight Measurement characteristic, and it includes the BMI and Height fields with the appropriate flag set in the Flags field.

  The value of each field of the characteristic meets the requirements of the service.

  The value of the BMI Supported bit of the cached Weight Scale Feature characteristic is set to 1.

  The RFU bits of the Flags field are set to zero.

WSS/SEN/CI/BV-05-C [Stored Weight Measurements – Single User]

- Test Purpose

  Verify that the single-user IUT can send multiple indications of stored Weight Measurement characteristics that include the Time Stamp field.
- Reference

  [3] 3.2.1.3
- Initial Condition
  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - The Weight Measurement characteristic is configured for indication.
  - The Lower Tester has read and cached the value of the Weight Scale Feature characteristic.
  - Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.

- If IUT permissions for the Weight Measurement characteristic require a specific security mode or security level, establish a connection meeting those requirements.
- If a connection exists, it should be disconnected.

- Test Procedure

  1. Perform an action on the IUT that will induce it to store several (e.g., 5 or more) Weight measurements.
  2. Perform an action on the IUT that will induce it to send stored measurements (i.e., the IUT advertises). The IUT and Lower Tester connect.
  3. If the devices were not bonded, the Lower Tester configures the Weight Measurement characteristic for indication.
  4. The Lower Tester receives one ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic handle and value along with the Time Stamp field.
  5. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
  6. Repeat steps 4–5 until all stored measurements are received (the IUT may terminate the connection upon completion).
  7. Verify that the characteristic value in each indication contains the time stamp field.
  8. Verify that the indications are received in order according to the time stamp with the oldest measurement received first.

- Expected Outcome

  Pass verdict

  The IUT sends several indications of the Weight Measurement characteristic.

  Each characteristic includes the Time Stamp field with the appropriate flag set in the Flags field.

  The value of each field of the characteristic meets the requirements of the service.

  The value of the Time Stamp Supported bit of the cached Weight Scale Feature characteristic is set to 1.

  The RFU bits of the Flags field are set to zero.

  The indications are received with the oldest data being sent first followed by the next oldest data (in FIFO order) until all stored data has been transferred.

WSS/SEN/CI/BV-06-C [Stored Weight Measurements – Multiple Users]

- Test Purpose

  Verify that the multi-user IUT can send multiple indications of stored Weight Measurement characteristics that include the Time Stamp field and the User ID field to the designated Lower Tester.

- Reference

  [3] 3.2.1.3, 3.2.1.4

- Initial Condition

  - If the IUT requires a bonding procedure, then perform a bonding procedure.
  - If the IUT requires the use of consent, the Lower Tester registers a new user and retains the chosen consent code and the assigned User ID.
  - The Weight Measurement characteristic is configured for indication.
  - The Lower Tester has read and cached the value of the Weight Scale Feature characteristic.

- Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1, if using an LE transport, or Section 4.2.2 if using a BR/EDR transport.
- The IUT has previously been configured for at least two users and Lower Tester has been assigned only one User ID at initial connection with the IUT.
- If IUT permissions for the Weight Measurement characteristic require a specific security mode or security level, establish a connection meeting those requirements.
- If a connection exists, it should be disconnected.

- Test Procedure

  1. Perform an action on the IUT that will induce it to store several (e.g., 5 or more) Weight measurements for the user assigned to the Lower Tester and also several (e.g., 5 or more) Weight measurements for one or more users not assigned to the Lower Tester.
  2. Perform an action on the IUT that will induce it to send stored measurements (i.e., the IUT advertises). The IUT and Lower Tester connect.
  3. If the devices were not bonded, the Lower Tester configures the Weight Measurement characteristic for indication.
  4. The Lower Tester receives one ATT_Handle_Value_Indication from the IUT containing the Weight Measurement characteristic handle and value along with the Time Stamp field and appropriate User ID value.
  5. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
  6. Repeat steps 4-5 until all stored measurements are received (the IUT may terminate the connection upon completion).
  7. Verify that the characteristic value in each indication contains the time stamp field.
  8. Verify that the indications are received in order according to the time stamp with the oldest measurement received first.

- Expected Outcome

  Pass verdict

  The IUT sends several indications of the Weight Measurement characteristic.

  Each characteristic includes the Time Stamp field and User ID field with the appropriate flag set in the Flags field.

  The value of each field of the characteristic meets the requirements of the service.

  The value of the Time Stamp Supported bit of the cached Weight Scale Feature characteristic is set to 1.

  The value of the Multiple Users Supported bit of the cached Weight Scale Feature characteristic is set to 1.

  The value of the User ID field is consistent with the value assigned to the Lower Tester at initial configuration.

  The Lower Tester does not receive any measurements for users to which it is not associated.

  The RFU bits of the Flags field are set to zero.

  The indications are received with the oldest data being sent first followed by the next oldest data (in FIFO order) until all stored data has been transferred.

5 Test case mapping

The Test Case Mapping Table (TCMT) maps test cases to specific requirements in the ICS. The IUT will be tested in all roles for which support is declared in the ICS document.

The columns for the TCMT are defined as follows:

Item: Contains a logical expression based on specific entries from the associated ICS document. Contains a logical expression (using the operators AND, OR, NOT as needed) based on specific entries from the applicable ICS document(s). The entries are in the form of y/x references, where y corresponds to the table number and x corresponds to the feature number as defined in the ICS document for Weight Scale Service (WSS) [4].

Feature: A brief, informal description of the feature being tested.

Test Case(s): The applicable test case identifiers are required for Bluetooth Qualification if the corresponding y/x references defined in the Item column are supported. Further details about the function of the TCMT are elaborated in [1].

For the purpose and structure of the ICS/IXIT, refer to [1].

Item	Feature	Test Case(s)
WSS 0/1	Discover Weight Scale Service	WSS/SEN/SGGIT/SER/BV-01-C
WSS 2/1	Weight Scale Service – SDP Record	WSS/SEN/SGGIT/SDP/BV-01-C
WSS 4/1	Weight Scale Feature Characteristic	WSS/SEN/CR/BV-01-C
WSS 4/1 AND NOT WSS 4a/2	Weight Scale Feature Characteristic	WSS/SEN/SGGIT/CHA/BV-01-C
WSS 4a/2	Weight Scale Feature Indication	WSS/SEN/SGGIT/CHA/BV-03-C WSS/SEN/SGGIT/ISFC/BV-01-C
WSS 4/2	Weight Measurement Characteristic	WSS/SEN/SGGIT/CHA/BV-02-C WSS/SEN/CON/BV-01-C WSS/SEN/CI/BV-01-C
WSS 4/3	Time Stamp field of the Weight Measurement Characteristic	WSS/SEN/CI/BV-02-C
WSS 3/1 AND NOT WSS 3/2	Stored Weight Measurement Characteristics – Single User	WSS/SEN/CI/BV-05-C
WSS 3/2	User ID field of the Weight Measurement Characteristic	WSS/SEN/CI/BV-03-C
WSS 3/1 AND WSS 3/2	Stored Weight Measurement Characteristics – Multiple Users	WSS/SEN/CI/BV-06-C
WSS 4/5	BMI and Height fields of the Weight Measurement Characteristic	WSS/SEN/CI/BV-04-C

Table 5.1: Test case mapping

6 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2014-10-21	Publication
	1.0.1r00	2016-05-26	Converted to new Test Case ID conventions as defined in TSTO v4.1.
	1.0.1r01	2016-06-18	Converted to current test specification template
1	1.0.1	2016-07-14	Prepared for TCRL 2016-1 publication.
	1.0.2r00	2019-04-09	TSE 11480 (rating 2): Updated template. Added use of consent in initial conditions for WSS/SEN/CI/BV-01-C – -04-C and -06-C.
2	1.0.2	2019-07-29	Approved by BTI. Prepared for TCRL 2019-1 publication.
	p3r00–r03	2022-03-22 – 2022-05-19	TSE 17270 (rating 2): Converted the following test cases to GGIT: WSS/SEN/SD/BV-01-C and -02-C, WSS/SEN/DEC/BV-01-C and -02-C, and WSS/SEN/DES/BV-01-C. The new GGIT converted TCIDs are: WSS/SEN/SGGIT/SER/BV-01-C, WSS/SEN/SGGIT/SDP/BV-01-C, WSS/SEN/SGGIT/CHA/BV-01-C and -02-C. Updated TCMT accordingly. Updated the “Test groups” section, and added the GGIT material to the TCID conventions section. Updated references to the new Generic GATT Integrated Tests section globally. TSE 18394 (rating 1): Removed direct references to GATT test cases from WSS/SEN/CR/BV-01-C and WSS/SEN/CON/BV-01-C. Removed direct references to GATT TS in ATT Bearer preambles. TSE 18728 (rating 1): Editorials to align the document with the latest TS template in anticipation of a future .Z release. Assigned publication number 2 to previous v1.0.2 and aligned copyright page with v2 of the DNMD. Additional editorials to align with the latest TS template. Consistency checker update.
3	p3	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.
	p4r00–r01	2024-07-30 – 2024-08-28	TSE 16704 (rating 4): Per E16254, add new TCs WSS/SEN/SGGIT/CHA/BV-03-C and WSS/SEN/SGGIT/ISFC/BV-01-C. Updated the TCMT accordingly. Updated the references list and the TCID conventions table.
4	p4	2024-10-08	Approved by BTI on 2024-09-11. WSS v1.0.1 adopted by the BoD on 2024-10-01. Prepared for TCRL 2024-2-addition publication.

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