



PROGRAMME & DEVELOPMENT SERVICES

XML

Services

Ver. 10.0.1

Unit Test Plan for Tracking Service



Table of Contents

1	TEST ENVIRONMENT	
1.1	XML PI Service Gateway Installation	3
1.1.1	Hardware	
1.1.2	Software	
1.1.3	Special Test Needs	
1.2	DHL Client Installation	3
1.2.1	Hardware	
1.2.2	Software	
1.2.3	Special Test Needs	
2	UNIT TEST REPORT	
3	TEST CASES	
3.1	Shipment Tracking Service (Known Query message)	5
3.2	Shipment Tracking Service (Invalid Query Message)	6
3.3	Shipment Tracking Service (No data found Query Message)	6
3.4	Shipment Tracking Service (Unknown Query Message)	6
3.5	Shipment Tracking Service (System Unavailable Response Message)	7
3.6	Shipment Tracking Service (Multiple Shipper References Unknown Query Request)	7
4	NOTES	
4.1	Tracking Service mandatory fields and field patterns	8
4.2	Warnings / Error messages returned in case of incorrect data	8
5	DEFINITIONS	
5.1	Known Query	8
5.2	Unknown Query	8
5.3	Invalid Query	8
5.3.1	An "Invalid" XML document is a "Well Formed" XML document, which does not conform to the rules of a Document Type Definition (DTD) or XML schema specified for the same.	
5.3.2	In case of Unknown AWB Query, multiple shipper references are not supported by SWG. In such case XML Services sends Error in response.	
5.4	Well Formed XML	8

This document contains 11 Numbered pages.



1 TEST ENVIRONMENT

1.1 XML PI Service Gateway Installation

1.1.1 Hardware

- HPUX 11.11
- Terminal Emulator H/W e.g. IBM PC

1.1.2 Software

- JDK 1.5

1.1.3 Special Test Needs

- Access to XMLPI application with valid credential

1.2 DHL Client Installation

1.2.1 Hardware

- Windows XP or above

1.2.2 Software

- JDK 1.5

1.2.3 Special Test Needs

- Client side environment needs to be set for java execution.



2 UNIT TEST REPORT

Author:	MyDHL API team
Program Name:	Tracking Service
Functionality Tested:	Tracking Service
Test Execution Procedure:	Once the application server is up and running, open a command prompt and run the 'runDHLClient.cmd' file. The DHLClient software should follow correct URL and file names and directory path to read request XML messages and stored response. The following URL https://xmlpitest-ea.dhl.com/XMLShippingServlet is an example used for testing purpose.
Test Results Checking Method:	The results are stored in XML format in the directory specified in the runDHLClient.cmd file.



3 TEST CASES

3.1 Shipment Tracking Service (Known Query message)

Sl. No:	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send a valid multiple AWB Tracking Request (Known). Ref: TrackingRequest_MultipleAWB.xml	Tracking response is received and stored in the specified directory. TrackingResponse_MultipleAWB.xml
2	Run the runDHLClient.cmd file to send a valid Single AWB Tracking Request (Known). Ref: TrackingRequest_SingleAWB.xml	Tracking response is received and stored in the specified directory. TrackingResponse_SingleAWB.xml
3	Run the runDHLClient.cmd file to send a valid License Plate Number Tracking (Known). Ref: Repeat the above step for all the three cases: 1. To Fetch only Shipment Details, "PiecesEnabled" element value should be to "S" TrackingRequest_SingleLP_PieceEnabled_S_1.xml 2. To Fetch only Piece Details, "PiecesEnabled" element value should be set to "P". TrackingRequest_SingleLP_PieceEnabled_P_1.xml 3. To fetch both Shipment and Piece Details, "PiecesEnabled" element value should be set to "B". TrackingRequest_SingleLP_PieceEnabled_B_1.xml	Tracking response is received and stored in the specified directory. 1. TrackingResponse_SingleLP_PieceEnabled_S_1.xml 2. TrackingResponse_SingleLP_PieceEnabled_P_1.xml 3. TrackingResponse_SingleLP_PieceEnabled_B_1.xml
4	Run the runDHLClient.cmd file to send a valid multiple License Plate Number Tracking Request (Known). Ref: 1. To Fetch only Shipment Details, "PiecesEnabled" element value should be set to "S". TrackingRequest_MultipleLP_PieceEnabled_S_1.xml 2. To Fetch only Piece Details, "PiecesEnabled" element value should be set to "P". TrackingRequest_MultipleLP_PieceEnabled_P_1.xml 3. To Fetch both Shipment and Piece Details, "PiecesEnabled" element value should be set to "B". TrackingRequest_MultipleLP_PieceEnabled_B_1.xml	Tracking response is received and stored in the specified directory. 1. TrackingResponse_MultipleLP_PieceEnabled_S_1.xml 2. TrackingResponse_MultipleLP_PieceEnabled_P_1.xml 3. TrackingResponse_MultipleLP_PieceEnabled_B_1.xml

3.2 Shipment Tracking Service (Invalid Query Message)

Sl. No:	Condition to be Tested	Expected Result
1	<p>Run the runDHLClient.cmd file to send an invalid Unknown Tracking Request. E.g. The Shipper reference type segment requires two elements ReferenceType and ReferenceID in the same order. Change the order as below a) ReferenceID b) ReferenceType</p> <p>Ref: TrackingRequestInvalidUnKnown.xml</p>	<p>Error response is received and stored in the specified directory. The XML has error condition code and condition data. In this case the error message reads as Error Parsing incoming request XML Error: cvc-complex-type.2.4.a: Invalid content was found starting with element 'ReferenceType'. One of '{ReferenceID}' is expected. at line 14, column 18</p> <p>Track-res-XML-Parse-Err.xml</p>

3.3 Shipment Tracking Service (No data found Query Message)

Sl.No.	Condition to be Tested	Expected Result
1	<p>Run the runDHLClient.cmd to send the known Tracking Request with any arbitrary airway bill number. Eg. Query for AWB: 123456789</p> <p>Ref: TrackingRequestKnown.xml</p>	<p>Tracking response is received and stored in the directory. The response message has Action Status as 'No Shipments Found'. The condition data is 'No ShipmentsFound for AWBNumber 6017300993</p> <p>SingleknownTrackResponse-no-data-found.xml</p>

3.4 Shipment Tracking Service (Unknown Query Message)

Sl.No.	Condition to be Tested	Expected Result
1	<p>Run the runDHLClient.cmd to send the unknown Tracking Request</p> <p>Ref: TrackingRequestUnKnown.xml</p>	<p>Tracking response is received and stored in the specified directory.</p> <p>RUnknownTrackResponse.xml</p>



3.5 Shipment Tracking Service (System Unavailable Response Message)

SI. No:	Condition to be Tested	Expected Result
1	<p>To generate a response when DHL backend services (GQSX) is not available, change the GQSX URL in gqsx.properties file on the server to some erroneous URL. Run the runDHLClient.cmd file to send a valid known Tracking Request</p> <p>Ref: TrackingRequestKnown.xml</p>	<p>Shipment Tracking error response is received and stored in the specified directory. The message has ConditionData as 'System unavailable'.</p> <p>TrackingErrorResponse-system-unavailable.xml</p>

3.6 Shipment Tracking Service (Multiple Shipper References Unknown Query Request)

SI. No:	Condition to be Tested	Expected Result
1	<p>Run the runDHLClient.cmd file to send an invalid Tracking Request (Unknown). This is Multiple Shipper Reference.</p> <p>Ref: TrackingRequestUnknown-multiple-sref.xml</p>	<p>Shipment Tracking error response is received and stored in the specified directory. The message has ConditionData as "Multiple shipper references are not supported".</p> <p>TrackingResponseUnknown-multiple-sref.xml</p>



4 NOTES

4.1 Tracking Service mandatory fields and field patterns

Please refer to section 'Shipment Tracking Request' of [XMLServices10.0.2_Tracking.pdf](#) for details of all mandatory fields and acceptable values for all Shipment Tracking Request messages.

4.2 Warnings / Error messages returned in case of incorrect data

Please refer to section 'Tracking Service' of [Reference_Data.xls](#) document - [<Error Messages>](#) tab sheet for details of all warnings and error messages received in case of incorrect data.

5 DEFINITIONS

5.1 Known Query

A tracking query is called as a 'known' query if the query criteria include a valid Airway Bill Number.

5.2 Unknown Query

A tracking query is called as 'unknown' when the query criteria include a valid account number, shipper reference number and optional date range.

5.3 Invalid Query

5.3.1 An "Invalid" XML document is a "Well Formed" XML document, which does not conform to the rules of a Document Type Definition (DTD) or XML schema specified for the same.

5.3.2 In case of Unknown AWB Query, multiple shipper references are not supported by SWG. In such case XML Services sends Error in response.

5.4 Well Formed XML

A "Well Formed" XML document is a document that conforms to the XML syntax rules.