

PROGRAMME & DEVELOPMENT SERVICES

XML Services

Ver. R3.4.0

Unit Test Plan for Shipment Validation Service (Global schema)

DHL PROPRIETARY AND CONFIDENTIAL

Table of Contents

1 TEST ENVIRONMENT 3
1.1 XML Service Gateway Installation 3
1.1.1 Hardware 3
1.1.2 Software 3
1.1.3 Special Test Needs 3
1.2 DHLClient Installation 3
1.2.1 Hardware 3
1.2.2 Software 3
1.2.3 Special Test Needs 3
2 UNIT TEST REPORT 3
3 TEST CASES 4
3.1 Shipment Validation Service (Valid XML message with correct data) 4
3.2 Shipment Validation Service (Malformed XML Message) 8
3.3 Shipment Validation Service (Invalid XML Message) 8
3.4 Shipment Validation Service (Incorrect Data XML Message) 9
4 Notes 9
4.1 Shipment Validation mandatory fields and field patterns 9
4.2 Warnings / Error messages returned in case of incorrect data 9
5 DEFINITIONS 9
5.1 Well Formed XML 10
5.2 Malformed XML 10
5.3 Valid XML 10
5.4 Invalid XML 10
5.5 Incorrect Data XML 10

This Document Contains 10 numbered pages.

1 TEST ENVIRONMENT

1.1 XML Service Gateway Installation

1.1.1 Hardware

- Linux v6.x 64 bits
- Terminal Emulator H/W e.g. IBM PC

1.1.2 Software

- JDK 1.7

1.1.3 Special Test Needs

- Access to XML application with valid credential

1.2 DHLClient Installation

1.2.1 Hardware

- Windows XP Desktop or above

1.2.2 Software

- JDK 1.5 or above

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	:	Shipment Validation service
Functionality Tested	:	Shipment Validation service
Test Execution Procedure	:	Once the application server is up and running, open a command prompt and run the 'runDHLClient.cmd' file. The runDHLClient 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 Validation Service (Valid XML message with correct data)

S.No.	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send a valid AP shipment validation request for international shipment with request of 2 pieces with piece segment defined and label image output. 01_Request_CNtoMY_RegularShipment.xml	Shipment Validate response is received and stored in the specified directory. 01_Response_CNtoMY_RegularShipment.xml
2	Run the runDHLClient.cmd file to send a valid EU shipment validation request for international shipment with request of 2 pieces with piece segment defined and label image output. 02_Request_DEtoUS_RegularShipment.xml	Shipment Validate response is received and stored in the specified directory. 02_Response_DEtoUS_RegularShipment.xml
3	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Paperless shipment request 03_Request_CNtoMY_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 03_Response_CNtoMY_PLTShipment.xml
4	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Paperless shipment request 04_Request_GBtoFR_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 04_Response_GBtoFR_PLTShipment.xml
05	Run the runDHLClient.cmd file to send a valid AM shipment validation request with Paperless shipment request 05_Request_UStoNZ_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 05_Response_UStoNZ_PLTShipment.xml
6	Run the runDHLClient.cmd file to send a valid PLT shipment request. 06_Request_UStoDE_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 06_Response_UStoDE_PLTShipment.xml
7	Run the runDHLClient.cmd file to send a valid AM shipment validation request with Paperless shipment request and require ODD Link option 07_Request_DEtoNZ_PLTShipment-ODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 07_Response_DEtoNZ_PLTShipment-ODDLinkReq.xml

S.No.	Condition to be Tested	Expected Result
8	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Paperless shipment request and require ODD Link option. 08_Request_CNtoMY_PLTShipmen-ODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 08_Response_CNtoMY_PLTShipmen-ODDLinkReq.xml
9	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Paperless shipment request and require ODD Link option. 09_Request_GBtoFR_PLTShipment-ODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 09_Response_GBtoFR_PLTShipment-ODDLinkReq.xml
10	Run the runDHLClient.cmd file to send a valid AM shipment validation request with Advance Shipment request with selected label template and customer's logo image. 10_Request_UStoNZ_AdvancePLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 10_Response_UStoNZ_AdvancePLTShipment.xml
11	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Advance Shipment request with selected label template and customer's logo image. 11_Request_CNtoMY_AdvancePLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 11_Response_CNtoMY_AdvancePLTShipment.xml
12	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Advance Shipment request with selected label template and customer's logo image. 12_Request_GBtoFR_AdvancePLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 12_Response_GBtoFR_AdvancePLTShipment.xml
13	Run the runDHLClient.cmd file to send a valid Labelless shipment request which request QR code. 13_Request_SGtoUS_RequestQRCode.xml	Shipment Validate response is received and stored in the specified directory. 13_Response_SGtoUS_RequestQRCode.xml
14	Run the runDHLClient.cmd file to send a valid Labelless shipment request which request QR code and accepts LID. 14_Request_SGtoUS_RequestQRCode-LID.xml	Shipment Validate response is received and stored in the specified directory. 14_Response_SGtoUS_RequestQRCode-LID.xml
15	Run the runDHLClient.cmd file to send a valid request with estimated tariff returned. 15_Request_GBtoFR_GetPriceEstimate-Y.xml	Shipment Validate response is received and stored in the specified directory. 15_Response_GBtoFR_GetPriceEstimate-Y.xml

DHL PROPRIETARY AND CONFIDENTIAL

S.No.	Condition to be Tested	Expected Result
15	Run the runDHLClient.cmd file to send a valid request with estimated tariff returned. 15_Request_GBtoFR_GetPriceEstimate-Y.xml	Shipment Validate response is received and stored in the specified directory. 15_Response_GBtoFR_GetPriceEstimate-Y.xml
16	Run the runDHLClient.cmd file to send a valid request with no estimated tariff returned. 16_Request_CNtoNZ_GetPriceEstimate-N.xml	Shipment Validate response is received and stored in the specified directory. 16_Response_CNtoNZ_GetPriceEstimate-N.xml
17	Run the runDHLClient.cmd file to send a valid AM shipment validation request with regular shipment request with selected label template and customer's logo image. 17_Request_UStoNZ_LabelTemplateCustLogo.xml	Shipment Validate response is received and stored in the specified directory. 17_Response_UStoNZ_LabelTemplateCustLogo.xml
18	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Customer Barcode Text and using Customer Barcode label template. 18_Request_GBtoFR_CustomerBarcodeText.xml	Shipment Validate response is received and stored in the specified directory. 18_Response_GBtoFR_CustomerBarcodeText.xml
19	Run the runDHLClient.cmd file to send a valid request for returns invoice. 19_Request_CNtoUS_ReturnsInvoice.xml	Shipment Validate response is received and stored in the specified directory. 19_Response_CNtoUS_ReturnsInvoice.xml
20	Run the runDHLClient.cmd file to send a valid request with Import Customs Duties element and/or Import Taxes element. 20_Request_CNtoMY_ImportCustomsDuties-ImportTaxes.xml	Shipment Validate response is received and stored in the specified directory. 20_Response_CNtoMY_ImportCustomsDuties-ImportTaxes.xml
21	Run the runDHLClient.cmd file to send a valid regular request with Shipment Document Reference and Document Type Name. 21_Request_GBtoFR_ShpDocRefDocTypeName.xml	Shipment Validate response is received and stored in the specified directory. 21_Response_GBtoFR_ShpDocRefDocTypeName.xml
22	Run the runDHLClient.cmd file to send a valid request with piece identification data identifier value. 22_Request_SGtoDE_PieceIdentificationDataIdentifier.xml	Shipment Validate response is received and stored in the specified directory. 22_Response_SGtoDE_PieceIdentificationDataIdentifier.xml
23	Run the runDHLClient.cmd file to send a valid request with Buyer shipping role elements. 23_Request_AUtoFR_BuyerRole.xml	Shipment Validate response is received and stored in the specified directory. 23_Response_AUtoFR_BuyerRole.xml

S.No.	Condition to be Tested	Expected Result
24	Run the runDHLClient.cmd file to send a valid request with Ultimate Consignee shipping role elements. 24_Request_UStoGB_UltimateConsigneeRole.xml	Shipment Validate response is received and stored in the specified directory. 24_Response_UStoGB_UltimateConsigneeRole.xml
25	Run the runDHLClient.cmd file to send a valid request with Broker shipping role elements. 25_Request_UStoGB_BrokerRole.xml	Shipment Validate response is received and stored in the specified directory. 25_Response_UStoGB_BrokerRole.xml
26	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Dangerous Goods items. 26_Request_GBtoFR_DangerousGoods.xml	Shipment Validate response is received and stored in the specified directory. 26_Response_GBtoFR_DangerousGoods.xml
27	Run the runDHLClient.cmd file to send a valid request with Dangerous Good Custom Description element. 27_Request_MYtoAU_DangerousGoodsCustomDescription.xml	Shipment Validate response is received and stored in the specified directory. 27_Response_MYtoAU_DangerousGoodsCustomDescription.xml
28	Run the runDHLClient.cmd file to send a valid request with multiple UN Codes Dangerous Good element. 28_Request_MYtoAU_DangerousGoodsMultipleUNCodes.xml	Shipment Validate response is received and stored in the specified directory. 28_Response_MYtoAU_DangerousGoodsMultipleUNCodes.xml
29	Run the runDHLClient.cmd file to send a valid request with <RequestShipmentDataValidation> of 'Y' element. 29_Request_CNtoSG_RequestShipmentDataValidation.xml	Shipment Validate response is received and stored in the specified directory. 29_Response_CNtoSG_RequestShipmentDataValidation.xml
30	Run the runDHLClient.cmd file to send a valid request with <SinglePieceImage> of 'Y' and <LinkLabelsByPieces> of 'Y' element. 30_Request_CNtoSG_SinglePieceImage-LinkLabelsByPieces.xml	Shipment Validate response is received and stored in the specified directory. 30_Response_CNtoSG_SinglePieceImage-LinkLabelsByPieces.xml
31	Run the runDHLClient.cmd file to send a valid request with multiple instances of <ExportDeclaration> 31_Request_CNtoJP_MultipleExportDeclarations.xml	Shipment Validate response is received and stored in the specified directory. 31_Response_CNtoJP_MultipleExportDeclarations.xml

3.2 Shipment Validation Service (Malformed XML Message)

Sl. No	Condition to be Tested	Expected Results
1	Run the runDHLClient.cmd file to send a malformed EU Shipment validation request. E.g. remove the end tag of the root element of request message Malformed1_Request_CNtoDE.xml	Error response is received and stored in the specified directory. The XML has error condition code and data. In this case the error message will be like *'Error in parsing request XML:Please verify the service name and schema version. User request is having invalid schema –'* Malformed1_Response_CNtoDE.xml

3.3 Shipment Validation Service (Invalid XML Message)

Sl. No	Condition to be Tested	Expected Results
1	Run the runDHLClient.cmd file to send an invalid Shipment validation request. Example: Provide invalid RegionCode element value. Invalid1_Request_CNtoMY_RegionCode.xml	Error response is received and stored in the specified directory. The XML has error condition code and data. In this case the error message will be like *'Error in parsing request XML:Error: cvc-enumeration-valid: Value 'US' is not facet-valid with respect to enumeration '[AP, EU, AM]'. It must be a value from the enumeration. at line 15, column 32'* Invalid1_Response_CNtoMY_RegionCode.xml
2	Run the runDHLClient.cmd file to send an invalid regular request with Consignee's <CompanyName> element value with exceeded the maximum length allowed. Invalid2_Request_CNtoMY_Exceed-CompanyName.xml	Error response is received and stored in the specified directory. The XML has error condition code and E.g. data. In this case the error message will be like *'Error in parsing request XML:Error: cvc-maxLength-valid: Value 'IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd' with length = '104' is not facet-valid with respect to maxLength '100' for type 'CompanyNameValidator'. at line 22, column 140'* Invalid2_Response_CNtoMY_Exceed-CompanyName.xml

3.4 Shipment Validation Service (Incorrect Data XML Message)

Sl. No:	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send an AP shipment validation request with valid service details and invalid global product code or local product code values. Incorrect1_Request_CNtoMY_InvalidProduct.xml	Shipment validate error message is received and saved in specified directory. The XML has error condition code and condition data from DCT. In this case the condition code reads, as *'Error in parsing request XML:Error: cvc-pattern-valid: Value '@' is not facet-valid with respect to pattern '([A-Z0-9])*' for type 'GlobalProductCode'. at line 79, column 49'* Incorrect1_Response_CNtoMY_InvalidProduct.xml
2	Run the runDHLClient.cmd file to send a AP shipment validation request with Paperless Trade Request with invalid service details and valid product code values. Incorrect2_Request_GBtoFR_InvalidService.xml	Shipment validate error message is received and saved in specified directory. The XML has error condition code and condition data from DCT. In this case the condition code reads, as *'The requested Special Service Codes @@ is not available. Please make sure data entered is valid before proceeding or contact our customer service.'* Incorrect2_Response_GBtoFR_InvalidService.xml

4 Notes

4.1 Shipment Validation mandatory fields and field patterns

Please refer to section '*Shipment Validation Request*' of XMLServices_R3.4.0_ShipmentValidationService.pdf for details of all mandatory fields and acceptable values for all Shipment Validation Request messages.

4.2 Warnings / Error messages returned in case of incorrect data

Please refer to section '*Shipment Validation*' – region specific of Reference_Data.xls document - <Error Messages> tab sheet, for details of all warnings and error messages received incase of incorrect data.

5 DEFINITIONS

5.1 Well Formed XML

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

5.2 Malformed XML

XML document, which does not conform to XML syntax rules, is called as "Malformed" XML.

5.3 Valid XML

A "Valid" XML document is a "Well Formed" XML document, which also conforms to the rules of a Document Type Definition (DTD) or XML schema.

5.4 Invalid XML

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

5.5 Incorrect Data XML

An "Incorrect Data XML" is a valid XML document, which has data that does not conform to business rules of DHL backend services.
E.g. The acceptable shipment date range is from current date or date up to next ten days. If the shipment date does not fall into this date range, then an error message is received.

~0~