



PROGRAMME & DEVELOPMENT SERVICES

XML

Services

Ver. 10.0.2

Unit Test Plan for Shipment Validation Service
(Global schema)



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)	9
3.3	Shipment Validation Service (Invalid XML Message)	10
3.4	Shipment Validation Service (Incorrect Data XML Message)	11
4	Notes	11
4.1	Shipment Validation mandatory fields and field patterns.....	11
4.2	Warnings / Error messages returned in case of incorrect data.....	11
5	DEFINITIONS	11
5.1	Well Formed XML	12
5.2	Malformed XML.....	12
5.3	Valid XML	12
5.4	Invalid XML.....	12
5.5	Incorrect Data XML	12

This Document Contains 12 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

- WebLogic 12c
- JDK 1.7
- xerces1.4

1.1.3 Special Test Needs

- Access to Global Ecom Gateway backend for AM region
- X Windows server should be set up.

1.2 DHLClient Installation

1.2.1 Hardware

- Windows XP Desktop or above

1.2.2 Software

- JDK 1.5 or above
- xerces1.4

1.2.3 Special Test Needs

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

2 UNIT TEST REPORT

Author	:	Mary Ang, Kosani Banerjee
Program Name	:	Shipment Validation services
Functionality Tested	:	Shipment Validation services
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_ShipmentValidateRequest_Global_AP_RegularShpmt.xml	Shipment Validate response is received and stored in the specified directory. 01_ShipmentValidateResponse_Global_AP_RegularShpmt.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_ShipmentValidateRequest_Global_EU_RegularShpmt.xml	Shipment Validate response is received and stored in the specified directory. 02_ShipmentValidateResponse_Global_EU_RegularShpmt.xml
3.	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Paperless shipment request 03_ShipmentValidationRequest_Global_AP_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 03_ShipmentValidationResponse_Global_AP_PLTShipment.xml
4.	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Paperless shipment request 04_ShipmentValidationRequest_Global_EU_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 04_ShipmentValidationResponse_Global_EU_PLTShipment.xml
5.	Run the runDHLClient.cmd file to send a valid AM shipment validation request with Paperless shipment request 05_ShipmentValidationRequest_Global_AM_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 05_ShipmentValidationResponse_Global_AM_PLTShipment.xml



S.No.	Condition to be Tested	Expected Result
6.	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. 06_ShipmentValidationRequest_Global_AM_Shipment_LabelTemplateCustLogo.xml	Shipment Validate response is received and stored in the specified directory. 06_ShipmentValidateResponse_Global_AM_Shipment_LabelTemplateCustLogo.xml
7.	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. 07_ShipmentValidateRequest_Global_AM_AdvanceShipment.xml	Shipment Validate response is received and stored in the specified directory. 07_ShipmentValidateResponse_Global_AM_AdvanceShipment.xml
8.	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. 08_ShipmentValidateRequest_Global_AP_AdvanceShipment.xml	Shipment Validate response is received and stored in the specified directory. 08_ShipmentValidateResponse_Global_AP_AdvanceShipment.xml
9.	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. 09_ShipmentValidateRequest_Global_EU_AdvanceShipment.xml	Shipment Validate response is received and stored in the specified directory. 09_ShipmentValidateResponse_Global_EU_AdvanceShipment.xml
10.	Run the runDHLClient.cmd file to send a valid AM shipment validation request with Paperless shipment request and require ODD Link option 10_ShipmentValidateRequest_Global_AM_PLTShipment_WithODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 10_ShipmentValidateResponse_Global_AM_WithODDLinkReq.xml



S.No.	Condition to be Tested	Expected Result
11.	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Paperless shipment request and require ODD Link option. 11 ShipmentValidateRequest Global AP PLTShipment_WithODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 11 ShipmentValidateResponse Global AP_WithODDLinkReq.xml
12.	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Paperless shipment request and require ODD Link option. 12 ShipmentValidateRequest Global EU PLTShipment_WithODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 12 ShipmentValidateResponse Global EU_WithODDLinkReq.xml
13.	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Customer Barcode Text and using Customer Barcode label template. 13 ShipmentValidateRequest Global EU CustomerBarcodeText.xml	Shipment Validate response is received and stored in the specified directory. 13 ShipmentValidateResponse Global EU_CustomerBarcodeText.xml
14.	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Dangerous Goods items. 14 ShipmentValidateRequest Global EU DangerousGoods.xml	Shipment Validate response is received and stored in the specified directory. 14 ShipmentValidateResponse Global EU DangerousGoods.xml
15	Run the runDHLClient.cmd file to send a valid regular request with Shipment Document Reference and Document Type Name. 15 ShipmentRequest EU WithShpDocRefDocTypeName.xml	Shipment Validate response is received and stored in the specified directory. 15 ShipmentResponse EU WithShpDocRefDocTypeName.xml
16	Run the runDHLClient.cmd file to send a valid request with estimated tariff returned. 16 ShipmentValidateRequest EU GetPriceEstimate_Y.xml	Shipment Validate response is received and stored in the specified directory. 16 ShipmentValidateResponse EU GetPriceEstimate_Y.xml



S.No.	Condition to be Tested	Expected Result
17	Run the runDHLClient.cmd file to send a valid request with no estimated tariff returned. 17 ShipmentValidateRequest_EU_GetPriceEstimate_N.xml	Shipment Validate response is received and stored in the specified directory. 17 ShipmentValidateResponse_EU_GetPriceEstimate_N.xml
18	Run the runDHLClient.cmd file to send a valid PLT shipment request with VAT22 related fields. 18 ShipmentValidation_v10.0_US-DE_request.xml	Shipment Validate response is received and stored in the specified directory. 18 ShipmentValidation_v10.0_US-DE_response.xml
19	Run the runDHLClient.cmd file to send a valid Labelless shipment request which request QR code. 19 ShipmentValidation_v10.0_RequestQRCode_request.xml	Shipment Validate response is received and stored in the specified directory. 19 ShipmentValidation_v10.0_RequestQRCode_response.xml
20	Run the runDHLClient.cmd file to send a valid Labelless shipment request which request QR code and accepts LID. 20 ShipmentValidation_v10.0_RequestQRCode_LID_request.xml	Shipment Validate response is received and stored in the specified directory. 20 ShipmentValidation_v10.0_RequestQRCode_response.xml
21	Run the runDHLClient.cmd file to send a valid request with new Roles “Shipper” and “Payer”. 21 ShipmentValidation_v10.0_request.xml	Shipment Validate response is received and stored in the specified directory. 21 ShipmentValidation_v10.0_response.xml
22	Run the runDHLClient.cmd file to send a valid request with piece identification data identifier value. 22 ShipmentValidateRequest_WithPieceIdentificationDataIdentifier.xml	Shipment Validate response is received and stored in the specified directory. 22 ShipmentValidateResponse_WithPieceIdentificationDataIdentifier.xml
23	Run the runDHLClient.cmd file to send a valid request with <BypassPLTError> value Y. 23 ShipmentValidateRequest_BypassPLTValidation.xml	Shipment Validate response is received and stored in the specified directory. 23 ShipmentValidateResponse_BypassPLTValidation.xml



24	Run the runDHLClient.cmd file to send a valid request for returns invoice. 24_ShipmentValidateRequest_ReturnsInvoice.xml	Shipment Validate response is received and stored in the specified directory. 24_ShipmentValidateResponse_ReturnsInvoice.xml
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3.2 Shipment Validation Service (**Malformed XML Message**)

Sl. No:	Condition to be Tested	Expected Result
1.	<p>Run the runDHLClient.cmd file to send</p> <p>a malformed AP Shipment validation</p> <p>Request for International (Dutiable). E.g. remove the end tag for 'Piece'</p> <p>M1_ShipmentValidateRequest_Global_AP_MalFormed.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 will be like <i>'Error in parsing request XML:The element type &quot;Piece&quot; must be terminated by the matching end-tag &quot;&lt;/Piece&gt;&quot;.'</i></p> <p>M1_ErrorResponse_Global_AP_MalFormed.xml</p>
2.	<p>Run the runDHLClient.cmd file to send</p> <p>a malformed EU Shipment validation request. E.g. remove the end tag of the root element of request message</p> <p>M2_ShipmentValidateRequest_Global_EU_MalFormed.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 will be like. <i>'Error in parsing request XML:The element type &quot;req:ShipmentRequest&quot; must be terminated by the matching end-tag &quot;&lt;/req:ShipmentRequest&gt;&quot;.'</i></p> <p>M2_ErrorResponse_Global_EU_MalFormed.xml</p>



3.3 Shipment Validation Service ([Invalid XML Message](#))

Sl. No	Condition to be Tested	Expected Results
1	<p>Run the runDHLClient.cmd file to send an invalid Shipment validation request. Example:</p> <p>Provide invalid RegionCode element value.</p> <p>Invalid1 Incorrect RegionCode Request.xml</p>	<p>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 <i>'Error in parsing request XML:Error: Datatype error: In element 'RegionCode':</i></p> <p><i>Value 'US' must be one of [AP, EU, AM]. at line 15, column 30.</i></p> <p>Invalid1 ErrorResponse.xml</p>
3	<p>Run the runDHLClient.cmd file to send an invalid regular request with Consignee's <CompanyName> element value with exceeded the maximum length allowed.</p> <p>Invalid2 Exceed CompanyName Request.xml</p>	<p>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 <i>'Error in parsing request XML:Error: Datatype error: In element 'CompanyName':Value 'IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd' with length '83' exceeds maximum length facet of '60'.. at line 23, column 114</i></p> <p>Invalid2 ErrorResponse.xml</p>



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 a AP shipment validation request with valid service details and invalid global product code or local product code values. Incorrect1_ShipmentValidateRequest_WithInvalidProductandValidServiceReq.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: Datatype error: In element 'GlobalProductCode': Value '@' does not match regular expression facet '([A-Z0-9])*..' at line 84, column 44. ErrorResponse_ShipmentValidateResponse_WithInvalidProductandValidServiceRes.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_ShipmentValidateRequest_WithValidProductandInvalidServiceReq.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.' ErrorResponse_ShipmentValidateResponse_WithValidProductandInvalidServiceRes.xml

4 Notes

4.1 Shipment Validation mandatory fields and field patterns

Please refer to section 'Shipment Validation Request' of [XMLServices10.0.6_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 in case 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 conform 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.

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