



PROGRAMME & DEVELOPMENT SERVICES

XML Services

Ver. 6.3

Unit Test Plan for Shipment Validation Service
(Global schema)



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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
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. ShipmentValidateRequest_Global_AP_RegularShpmt.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_EU_RegularShpmt.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidateResponse_Global_EU_RegularShpmt.xml
3.	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Paperless shipment request ShipmentValidationRequest_Global_AP_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidationResponse_Global_AP_PLTShipment.xml
4.	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Paperless shipment request ShipmentValidationRequest_Global_EU_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidationResponse_Global_EU_PLTShipment.xml
5.	Run the runDHLClient.cmd file to send a valid AM shipment validation request with Paperless shipment request ShipmentValidationRequest_Global_AM_PLTShipment.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidationRequest_Global_AM_Shipment_LabelTemplateCustLogo.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_AM_AdvanceShipment.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_AP_AdvanceShipment.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_EU_AdvanceShipment.xml	Shipment Validate response is received and stored in the specified directory. 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 ShipmentValidateRequest_Global_AM_PLTS_Shipment_WithODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_AP_PLTShipment_WithODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_EU_PLTShipment_WithODDLinkReq.xml	Shipment Validate response is received and stored in the specified directory. 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. ShipmentValidateRequest_Global_EU_CustomerBarcodeText.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidateResponse_Global_EU_CustomerBarcodeText.xml
14.	Run the runDHLClient.cmd file to send a valid EU shipment validation request with Dangerous Goods items. ShipmentValidateRequest_Global_EU_DangerousGoods.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidateResponse_Global_EU_DangerousGoods.xml
15.	Run the runDHLClient.cmd file to send a valid AP shipment validation request with valid product and service details. ShipmentValidateRequest_Global_AP_WithValidProductandServiceReq.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidateResponse_Global_AP_WithValidProductandServiceRes.xml
16.	Run the runDHLClient.cmd file to send a valid AP shipment validation request with Paperless Trade Request and use valid product and service field values. PLT_ShipmentValidateRequest_Global_AP_WithValidProductandServiceReq.xml	Shipment Validate response is received and stored in the specified directory. PLT_ShipmentValidateResponse_Global_AP_WithValidProductandServiceRes.xml



S.No.	Condition to be Tested	Expected Result
17.	Run the runDHLClient.cmd file to send a valid PLT request with <DeclaredValue> element value is equal to value provided in <ExportLineItem><Quantity>* <ExportLineItem><Value> and /req:ShipmentRequest/UseDHLInvoice field value 'Y'. PLT_ShipmentValidateRequest_Global_AP_CIV.xml	Shipment Validate response is received and stored in the specified directory and Custom Invoice generated. PLT_ShipmentValidateResponse_Global_AP_CIV.xml
18.	Run the runDHLClient.cmd file to send a valid regular request with maximum length of Consignee's Company Name, Address Line 1,2 and 3 elements. ShipmentRequest_AP_CN_MaxLengthCompanyAddrLines.xml	Shipment Validate response is received and stored in the specified directory. ShipmentResponse_AP_CN_MaxLengthCompanyAddrLines.xml
19.	Run the runDHLClient.cmd file to send a valid regular request with Shipment Document Reference and Document Type Name. ShipmentRequest_EU_WithShpDocRefDocTypeName.xml	Shipment Validate response is received and stored in the specified directory. ShipmentResponse_EU_WithShpDocRefDocTypeName.xml
20.	Run the runDHLClient.cmd file to send a valid regular request with get product capability only. Note: No estimated tariff returned. ShipmentValidateRequest_EU_Regular_v62_GetPriceEstimateN.xml	Shipment Validate response is received and stored in the specified directory. ShipmentValidateResponse_EU_Regular_v62_GetPriceEstimateN.xml



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 a malformed AP Shipment validation request for International (Dutiable). E.g. remove the end tag for 'Piece'</p> <p>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 "Piece" must be terminated by the matching end-tag "</Piece>".'</i></p> <p>ErrorResponse_Global_AP_MalFormed.xml</p>
2.	<p>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</p> <p>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 "req:ShipmentRequest" must be terminated by the matching end-tag "</req:ShipmentRequest>".'</i></p> <p>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 AM Shipment validation request condition for International (Dutiable). E.g. Acceptable values of 'DutyPaymentType' are 'S', 'R', 'T'. Give 'O'.</p> <p>ShipmentValidateRequest_Global_AM_Invalid.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 &apos;DutyPaymentType&apos; : Value &apos;O&apos; must be one of [S, R, T]. at line 23, column 40</i></p> <p>ErrorResponse_Global_AM_Invalid.xml</p>
2	<p>Run the runDHLClient.cmd file to send an invalid EU Shipment validation request condition for International (Dutiable). For weight element accepts values only in decimal. Give a fractional value like 12/12. and send the request</p> <p>ShipmentValidateRequest_Global_EU_Invalid.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 &apos;Weight&apos; : &apos;12/12&apos; is not a decimal at line 254, column 26'</i></p> <p>ErrorResponse_Global_EU_Invalid.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>ShipmentRequest_AP_CN_ExceedMax</p> <p>LengthCompayName.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 %&apos;CompanyName&apos; IBM Malaysia Sdn Bhd IBM Malaysia Sdn Bhd IBM Malaysia Sdn601&apos; with length &apos;61&apos; exceeds maximum length facet of &apos;60&apos;;.. at line 24, column 92'</i></p> <p>ErrorResponse_AP_CN_ExceedMaxLengthCompayName.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. ShipmentValidateRequest_Global_AP_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 ' <i>Error in parsing request XML:Error: Datatype error: In element &apos;GlobalProductCode&apos; : Value &apos;k&apos; does not match regular expression facet &apos;([A-Z0-9])*&apos;;.. at line 255, column 44</i> '. ErrorResponse_ShipmentValidateResponse_Global_AP_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. ShipmentValidateRequest_Global_AP_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 ' <i>The requested Special Service Codes 00 is not available. Please make sure data entered is valid before proceeding or contact our customer service.</i> '. ErrorResponse_ShipmentValidateResponse_Global_AP_WithValidProductandInvalidServiceRes.xml

4 Notes

4.1 Shipment Validation mandatory fields and field patterns

Please refer to section 'Shipment Validation Request' of [XMLServices6.3_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 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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