PROGRAMME & DEVELOPMENT SERVICES

XML Services

Ver 6.3

Unit Test Plan for Capability and Quote Service

TABLE OF CONTENTS

1 TEST ENVIRONMENT

1.1 XML Services Gateway

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
- Xercers 1.4.1

1.1.3 Special Test Needs

- Access to DCT Web services environment
- X Windows server should be set up.

1.2 DHLClient Installation

1.2.1 Hardware

- Windows XP and above

1.2.2 Software

- JDK 1.5 or above
- Xercers 1.4.1

1.2.3 Special Test Needs

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

2 UNIT TEST REPORT

Author	Mary, Kosani
Program Name	Capability and Quote service
Functionality Tested	Capability and Quote 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 Capability and Quote Service (Valid XML message with correct data)

GetCapability request

Sl. No:	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request for EU to EU country for Non-Dutiable products without account number and product defined. Ref. Valid1_Capbility_EUEU_MultipleBkgs_NonDutiable_Request.xml	Valid Capability service - GetCapability response is received stored in the specified directory. Note: this sample is having different Facility Code in response Ref. Valid1_Capbility_EUEU_MultipleBkgs_NonDutiable.xml
2	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request for EU to EU country for Dutiable products without account number and product defined. Ref. Valid2_Capability_EUEU_DutiableProd_Request.xml	Valid Capability service - GetCapability response is received stored in the specified directory. Ref. Valid2_Capability_EUEU_DutiableProd.xml
3	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request for EU to Non-EU country for Dutiable products without account number and product defined. Ref. Valid3_Capability_EU_NonEU_Dutiable_Request.xml	Valid Capability service - GetCapability response is received stored in the specified directory. Ref. Valid3_Capability_EU_NonEU_Dutiable.xml
4	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request for Non-EU to EU country for Dutiable products without account number and product defined. Ref. Valid4_Capability_NonEU_EU_Dutiable_Request.xml	Valid Capability service - GetCapability response is received stored in the specified directory. Ref. Valid4_Capability_NonEU_EU_Dutiable.xml
5	Run the runDHLClient.cmd file to send a valid Capability GetCapability service - request for Non-EU to Non-EU country for Dutiable products without account number and product defined. Ref. Valid5_Capability_NonEU_NonEU_DiffCountry_Dutiable_Request.xml	Valid Capability GetCapability service - response is received stored in the specified directory. Ref. Valid5_Capability_NonEU_NonEU_DiffCountry_Dutiable.xml
6	Run the runDHLClient.cmd file to send a valid Capability GetCapability service - request for Brazil (BR) to United States (US) for Dutiable products without account number and product defined. Ref. Valid6_Capability_BRUS_Request.xml	Valid Capability GetCapability service - response is received stored in the specified directory. Ref. Valid6_Capability_BRUS.xml

Sl. No:	Condition to be Tested	Expected Result
7	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request to retrieve list of all available independent and restricted services. Ref. Valid7_Capability_AllServicesIndRes_Request.xml	Valid Capability service - GetCapability response is received stored in the specified directory. Ref. Valid7_Capability_AllServicesIndRes.xml
8	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request which require additional pickup and delivery days Ref. Valid8_Capability_PUDeliveryAddsDays_Request.xml	Valid Capability service - GetCapability response is received stored in the specified directory. Ref. Valid8_Capability_PUDeliveryAddsDays.xml

GetQuote request

Sl. No:	Condition to be Tested	Expected Result
9	Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for AP which require remote area service, without account number and product defined. Ref. Valid9_Quote_AP_PriceBreakdownRAS_Request.xml	Valid Quote service - GetQuote response is received stored in the specified directory. Additional currencies are returned in the GetQuote response as well. Refer to <QtdSInAdCur> and <QtdSExtrChrgInAdCur> elements respectively in response xml. Ref. Valid9_Quote_AP_PriceBreakdownRAS.xml
10	Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for EU which require remote area service, without account number and product defined. Ref. Valid10_Quote_EU_PriceBreakdownRAS_Request.xml	Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid10_Quote_EU_PriceBreakdownRAS.xml
11	Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request with valid account number Ref: Valid11_QuoteRequest_WithValidAccount.xml	Valid Quote service - GetQuote response is received stored in the specified directory. Ref: Valid11_QuoteResponse_WithValidAccount.xml
12	Run the runDHLClient.cmd file to send a valid Quote service Ref: Valid12_Quote_VolWeightHigher_Request.xml	Valid Quote service - GetQuote response is received stored in the specified directory. Ref: Valid12_QuoteResponse_VolWeightHigher.xml

3.2   Capability and Quote Service (**Malformed XML** Message)

Sl. No:	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send a malformed Capability service - request e.g. remove the end tag </p:DCTRequest>. Ref. Malformed1_Capability_EUEU_DutiableProd_Request.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error. Ref. ErrorResponse_Malformed1_Capability_ EUEU_DutiableProd.xml
2	Run the runDHLClient.cmd file to send a malformed Capability service - request e.g. remove the end tag for 'CountryCode'. Ref. Malformed2_Capability_BRUS_Request.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error. Ref. ErrorResponse_Malformed2_Capability_BRUS.xml

3.3   Capability and Quote Service (**Invalid XML** Message)

Sl. No:	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send an invalid Capability service - request e.g. remove the 'SiteId' element from the request XML. Ref. Invalid1_Capability_EU_NonEU_Dutiable_ Request.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data "Error in parsing request XML:Error: The content of element type "ServiceHeader" must match" (MessageTime,GMTOffset?,MessageReference,SiteID,Password) ". at line 8, column 24". Ref. ErrorResponse_Invalid1_Capability_EU_Non EU_Dutiable.xml
2	Run the runDHLClient.cmd file to send an invalid Capability service - request e.g. Removing all the elements of the Request segment. Ref. Invalid2_Capability_NonEU_EU_Dutiable_ Request.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data "Error in parsing request XML:Error: The content of element type "Request" is incomplete, it must match "(ServiceHeader,MetaData)". at line 4, column 16". Ref. ErrorResponse_Invalid2_Capability_NonEU_EU_Dutiable.xml
3	Run the runDHLClient.cmd file to send an invalid Quote service request with invalid account number. Ref: Invalid3_QuoteRequest_WithInvalidAccount.xml	Error response is received and stored in the specified directory. The XML has error "Invalid account number. Please make sure data entered is valid before proceeding or contact our customer service. Ref: ErrorResponse_Invalid3_QuoteResponse_WithInvalidAccount.xml

3.4   Capability and Quote Service (Incorrect Data XML Message)

Sl. No:	Condition to be Tested	Expected Result
1	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request with incorrect origin location. Ref. Incorrect1_Capability_IncorrectOrigin_Request.xml	Error response is received and stored in the specified directory. The XML has error 'The origin location is invalid. Please check the data.' Ref. Incorrect1_Capability_IncorrectOrigin_Response.xml
2	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request with invalid SiteID. Ref. Incorrect2_Capbility_EUEU_NonDutiable_Request.xml	Error response is received and stored in the specified directory. The XML has error' Error in parsing request XML:Error: Datatype error: In element 'SiteID' : Value 'WO1234' with length '5' is less than minimum length facet of '6'.. at line 7, column 25'. Ref. Incorrect2_Capbility_EUEU_NonDutiable.xml

3.5   Capability and Quote service - mandatory fields and field patterns

Please refer to section '*Capability and Quote Request'* of XMLPI6.3_CapabilityAndQuoteService.pdf for details of all mandatory fields and acceptable values for all Capability and Quote service Request messages.

3.6   Warnings / Error messages returned in case of incorrect data

Please refer to section '*Capability and Quote Service*' of Reference_Data.XLS document - <Error Messages> tab sheet, for details of all warnings and error messages received in case of incorrect data.

4   DEFINITIONS

4.1   Well Formed XML

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

4.2   Malformed XML

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

4.3   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.

4.4   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.

4.5   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 bill account number entered should confirm to a valid AM account number.

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