



PROGRAMME & DEVELOPMENT SERVICES

XML Services

Ver 6.0

Unit Test Plan for Capability and Quote Service

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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
- Xerchers 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
- Xerchers 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 |
| 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 |

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| 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 |
| 9 | Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request to retrieve Non-Dutiable products With account number, With product defined and With service – Saturday Delivery. Ref. Valid9_Capability_NonEU_NonEU_WithAcctProd Service_Request.xml | Valid Capability service - GetCapability response is received stored in the specified directory. Ref. Valid9_Capability_NonEU_NonEU_WithAcct ProdService.xml |

GetQuote request

| Sl. No: | Condition to be Tested | Expected Result |
|---------|--|--|
| 10 | 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. Valid10_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. Valid10_Quote_AP_PriceBreakdownRAS.xml |
| 11 | 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. Valid11_Quote_EU_PriceBreakdownRAS_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid11_Quote_EU_PriceBreakdownRAS.xml |
| 12 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request to retrieve IMP price when Payer Country is same as Shipper Country, without account number and product defined. Ref. Valid12_Quote_IMPPricebyShipper_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid12_Quote_IMPPricebyShipper.xml |
| 13 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request to retrieve IMP price when Payer Country is same as Receiver Country, without account number and product defined. Ref. Valid13_Quote_IMPPricebyReceiver_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid13_Quote_IMPPricebyReceiver.xml |
| 14 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request to retrieve IMP price when Payer Country is 3 rd party country (neither Sender or Receiver Country), without account number and product defined. Ref. Valid14_Quote_IMPPriceby3rdParty_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid14_Quote_IMPPriceby3rdParty.xml |
| 15 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request with volumetric weight is higher than actual weight, without account number and product defined. Ref. Valid15_Quote_VolWeightHigher_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Note: The price should be calculated on volumetric weight if it is higher than the actual weight. Ref. Valid15_Quote_VolWeightHigher.xml |

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| Sl. No: | Condition to be Tested | Expected Result |
|---------|---|---|
| 16 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for Non-Dutiable products With account number, With Product defined and With Service – Saturday Delivery. Ref. Valid16_Quote_NonEUNonEU_WithAcctProd Service_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid16_Quote_NonEUNonEU_WithAcctProd Service.xml |
| 17 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for Non-Dutiable products With account number, With Product defined and With Insurance amount. Ref. Valid17_Quote_EU_NonEU_WithAcctProd Insurance_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid17_Quote_EU_NonEU_WithAcctProd Insurance.xml |
| 18 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for Dutiable products without account number and Product defined. Ref. Valid18_Quote_BRtoUS_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid18_Quote_BRtoUS.xml |
| 19 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for country which using suburb. Ref. Valid19_Quote_PEGtoEG_Suburb_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid19_Quote_PEGtoEG_Suburb.xml |
| 20 | Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request for Brazil country domestic shipment that require tax breakdown pricing Ref: Valid20_Quote_BRtoBR_TaxBreakdownPricing_Request.xml | Valid Quote service - GetQuote response is received stored in the specified directory. Ref. Valid20_Quote_BRtoBR_TaxBreakdownPricing.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. Valid14_Quote_IMPPriceby3rdParty_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 100 and condition data "Validation Failure: No Site ID provided". Ref. ErrorResponse_Invalid1_Capability_EU_NonEU_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)'". Ref. ErrorResponse_Invalid2_Capability_NonEU_EU_Dutiable.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 which no products are available for the search criteria. Ref. Incorrect1_Capability_DDNetworkNotAllowed_Request.xml | Error response is received and stored in the specified directory. The XML has error 'The requested product(s) not available based on your search criteria.' Ref. Incorrect1_Capability_DDNetworkNotAllowed.xml |
| 2 | Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request which having limited pickup. Ref. Incorrect2_Capability_LimitedPickup_Capability_Request.xml | Error response is received and stored in the specified directory. The XML has error 'The origin postcode does not provide standard pick up. Please call customer service for special handling.' Ref. Incorrect2_Capability_LimitedPickupCapability.xml |
| 3 | Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request with invalid SiteID. Ref. Incorrect3_Capability_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 8, column 27'. Ref. Incorrect3_Capability_EUEU_NonDutiable.xml |

3.5 Capability and Quote service - mandatory fields and field patterns

Please refer to section '*Capability and Quote Request*' of [XMLPI6.0_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 conform 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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