



PROGRAMME & DEVELOPMENT SERVICES

XML

Services

Ver 5.2

Unit Test Plan for Rating 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
- Xercers 1.4.1

1.1.3 Special Test Needs

- Access to eCom backend for EU region
- X Windows server should be set up.

1.2 DHLClient Installation

1.3 Hardware

- Windows XP and above

1.3.1 Software

- JDK 1.5
- Xercers 1.4.1

1.3.2 Special Test Needs

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

2 UNIT TEST REPORT

Author	
Program Name	Rating Services.
Functionality Tested	Rating 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 Rating Service (Valid XML message with correct data for both BookRating and Customer Rating)

Sl. No:	Condition to be Tested	Expected Result
1.	Run the runDHLClient.cmd file to send a valid Rating request with special services for customer rating. Ref. CustRatingRequest Valid SpclSvc1.xml .	Valid Rating response is received for customer rating and stored in the specified directory.
2.	Repeat the test case with the valid Rating request with no special services for both book rating and customer rating. Ref: BookRatingRequest Valid without SpclSvc.xml and CustRatingRequest Valid without SpclSvc.xml	Valid Rating response is received for both book rating and customer rating and stored in the specified directory.
3.	Run the runDHLClient.cmd file to send the Rating request for customer rating with special service type as “Q” or “delivery duty paid” Ref: CustRatingRequest Valid SpclSvc2.xml	Valid Rating response is received for both book rating and customer rating and stored in the specified directory
4.	Run the runDHLClient.cmd file to send the Rating request for Customer Rating with special service type as “I” or “Insurance” Ref: CustRatingRequest Valid SpclSvc3.xml	Valid Rating response is received for both book rating and customer rating and stored in the specified directory
5.	Run the runDHLClient.cmd file to send the Rating request for Customer Rating with special service type as “O” or “Onforwarding” Ref: CustRatingRequest Valid SpclSvc4.xml	Valid Rating response is received for both book rating and customer rating and stored in the specified directory
6.	Run the runDHLClient.cmd file to send the Rating request for Customer Rating with special service type as “T” or “Proof of Delivery” Ref: CustRatingRequest Valid SpclSvc5.xml	Valid Rating response is received for both book rating and customer rating and stored in the specified directory



3.2 Rating Service (Malformed XML Message for both BookRating and Customer Rating)

Sl. No:	Condition to be Tested	Expected Result
1.	Run the runDHLClient.cmd file to send a malformed Rating request for both book and customer rating e.g. remove the end tag </req: ShipmentCustRatingRequest >. Ref. BookRatingRequest_Malformed1.xml And CustRatingRequest_Malformed1.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error.
2.	Run the runDHLClient.cmd file to send a malformed Rating request for both book and customer rating e.g. remove the end tag for 'Piece' Ref. BookRatingRequest_Malformed2.xml and CustRatingRequest_Malformed2.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error.
3.	Run the runDHLClient.cmd file to send a malformed Rating request for book and customer rating–. e.g. remove the end tag of the root element of request message Ref. BookRatingRequest_Malformed3.xml and Cust RatingRequest_Malformed3.xml	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error.



3.3 Rating Service (Invalid XML Message for both BookRating and Customer Rating)

Sl. No:	Condition to be Tested	Expected Result
1.	Run the runDHLClient.cmd file to send an invalid rating request for both book rating and customer rating. e.g. remove the 'SiteId' element from the request XML. Ref. BookRatingRequest_InvalidSchema1.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".
2.	Run the runDHLClient.cmd file to send an invalid Rating request for both rating and customer rating e.g. Removing all the elements of the request segment. Ref: BookRatingRequest_InvalidSchema2.xml and CustRatingRequest_InvalidSchema2.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)' at line 10, column 13".
3.	Run the runDHLClient.cmd file to send an invalid Rating request –for both book rating and customer rating) e.g. The "WeightUnit" element in the "ShipmentDetails" expects a value "L" but give it as "K " Ref. BookRatingRequest_InvalidSchema3.xml and CustRating_InvalidSchema3.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: Datatype error: In element 'WeightUnit' : Value 'K' must be one of [L]. at line 41, column 30".



3.4 Rating Service (Incorrect Data XML Message)

Sl. No:	Condition to be Tested	Expected Result
1.	Run the runDHLClient.cmd file to send a Rating request for both book rating and customer rating e.g. Give duplicate segments of special services. Ref. BookRatingRequest Duplicate SpclSvc.xml and CustRatingRequest Duplicate SpclSvc.xml	Error response is received and stored in the specified directory. The XML has error condition code 113 and condition data “The same special service cannot be requested more than once: Duplicate SpecialServiceType value =S”.
2.	Run the runDHLClient.cmd file to send a Rating request for both book Rating and customer Rating. e.g.: If the consignee country is US then the postal code is mandatory but send a request with invalid US postal code. Ref. BookRatingRequest missing USPostCd.xml and CustRatingRequest missing USPostCd.xml	Error response is received and stored in the specified directory. The XML has error condition code “RA1018” and condition data “A rate could not be determined for the address specified. Please correct and re-submit”.
3.	Run the runDHLClient.cmd file to send a Rating request for customer rating. e.g. Put an invalid bill account number in case of Customer rating request . Ref BookRatingRequest Invalid AcctNo.xml and CustRatingRequest Invalid AcctNo.xml .	Error response is received and stored in the specified directory. The XML has error condition code “RA1020” and condition data “A system service is unavailable. Please resubmit your request at a later time”.
4	Run the runDHLClient.cmd file to send the Rating request for customer rating with incorrect shipment payment type. Ref: CustRatingRequest Invalid PaymentType.xml	Error response is received and stored in the specified directory. The XML has error condition code “RA1023” and condition data “Estimated rates are available only for your shipper account. No rate provided for shipments billed to recipient or third party”.
5	Run the runDHLClient.cmd file to send the Rating request for Customer Rating with weight passed without any decimal Ref: CustRatingRequest Invalid Weight.xml	Rating error response is received and saved in the specified directory. The XML has error condition code and condition data. (to be completed).
6	Run the runDHLClient.cmd file to send the Rating request for both BookRating and Customer Rating with invalid product code Ref: BookRatingRequest Invalid ProdCd.xml And CustRatingRequest Invalid ProdCd.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: Datatype error: In element 'ProductCode' : Value 'C' must be one of [D, W, X, F, N, P, E, R, U, A, B, K, T, Z] at line 44, column 32”.
7	Run the runDHLClient.cmd file to send the Rating request for both book and customer rating with invalid special service code. Ref: BookRatingRequest Invalid SpclSvcCd.xml And CustRatingRequest Invalid SpclSvcCd.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: Datatype error: In element 'SpecialServiceType' : Value 'M' must be one of [S, Q, I, O, T] at line 47, column 46”.



3.5 Rating mandatory fields and field patterns

Please refer to section '*Shipment Validation Request*' of [XMLServices5.2 RatingService AM.doc](#) for details of all mandatory fields and acceptable values for all Rating Request messages.

3.6 Warnings / Error messages returned in case of incorrect data

Please refer to section '*Rating Service*' of [Reference_Data.xls](#) document - <Error Messages> tab sheet, for details of all warnings and error messages received incase 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 US account number.