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## PROGRAMME & DEVELOPMENT SERVICES

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# XML

# Services

Ver 6.3

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Unit Test Plan for Routing Service for Global  
schema

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## Contents

1	TEST ENVIRONMENT.....	3
1.1	XML Service Gateway .....	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	Routing Service ( Valid XML message with correct data).....	4
3.2	Routing Service ( Malformed XML Message).....	4
3.3	Routing Service ( Invalid XML Message).....	4
3.4	Routing Service ( Incorrect Data XML Message) .....	5
3.5	Routing mandatory fields and field patterns .....	5
3.6	Warnings / Error messages returned in case of incorrect data.....	5
4	DEFINITIONS.....	6
4.1	Well Formed XML .....	6
4.2	Malformed XML.....	6
4.3	Valid XML.....	6
4.4	Invalid XML .....	6
4.5	Incorrect Data XML.....	6



# 1 TEST ENVIRONMENT

## 1.1 XML Service 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 respective region
- 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
- Xercers 1.4.1

### 1.2.3 Special Test Needs

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

# 2 UNIT TEST REPORT

<b>Author</b>	Mary
<b>Program Name</b>	Routing Services.
<b>Functionality Tested</b>	Routing Services.
<b>Test Execution Procedure</b>	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 <a href="https://xmlpitest-ea.dhl.com/XMLShippingServlet">https://xmlpitest-ea.dhl.com/XMLShippingServlet</a> is an example used for testing purpose.
<b>Test Results Checking Method:</b>	The results are stored in XML format in the directory specified in the runDHLClient.cmd file.



### 3 TEST CASES

#### 3.1 Routing Service ( Valid XML message with correct data)

Sl. No:	Condition to be Tested	Expected Result
1.	Run the runDHLClient.cmd file to send a valid Routing request. Ref. <a href="#">RouteRequest_Global_AP.xml</a> <a href="#">RouteRequest_Global_EU.xml</a> <a href="#">RouteRequest_Global_AM.xml</a>	Valid Routing response is received stored in the specified directory. <a href="#">RouteResponse_Global_AP.xml</a> <a href="#">RouteResponse_Global_EU.xml</a> <a href="#">RouteResponse_Global_AM.xml</a>

#### 3.2 Routing Service ( Malformed XML Message)

Sl. No:	Condition to be tested	Expected Result
1.	Run the runDHLClient.cmd file to send a malformed RouteRequest e.g. remove the end tag </ns1:RouteRequest >.  Ref. <a href="#">RouteRequest_Global_Malformed1.xml</a>	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error.  <a href="#">RouteErrorResponse_Global_Malformed1.xml</a>
2.	Run the runDHLClient.cmd file to send a malformed Routing request e.g. remove the end tag for 'City'  Ref. <a href="#">RouteRequest_Global_Malformed2.xml</a>	Error response is received and stored in the specified directory. The XML has error condition code 111 and condition data explaining the error.  <a href="#">RouteErrorResponse_Global_Malformed2.xml</a>

#### 3.3 Routing Service ( Invalid XML Message)

Sl. No:	Condition to be tested	Expected Result
1.	Run the runDHLClient.cmd file to send an invalid routing request e.g. remove the 'SoftwareName' element from the request XML.  Ref. <a href="#">RouteRequest_Global_Invalid1.xml</a>	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 'MetaData' is incomplete, it must match 'quot;(SoftwareName,SoftwareVersion)&quot;'. at line 13, column 15".  <a href="#">RouteErrorResponse_Global_Invalid1.xml</a>
2	Run the runDHLClient.cmd file to send an invalid Routing request e.g. Removing all the elements of the request segment.  Ref: <a href="#">RouteRequest_Global_Invalid2.xml</a>	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 'quot;(ServiceHeader)&quot;'. at line 5, column 13".  <a href="#">RouteErrorResponse_Global_Invalid2.xml</a>



### 3.4 Routing Service ( [Incorrect Data XML](#) Message)

Sl. No:	Condition to be Tested	Expected Result
1.	Run the runDHLClient.cmd file to send the Routing request. Ref: <a href="#">RouteRequest_Invalid_RequestType.xml</a>	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 'RequestType' : Value 'F' must be one of [O, D]. at line 17, column 31”.  <a href="#">RouteErrorResponse_Invalid_RequestType.xml</a>
2.	Run the runDHLClient.cmd file to send the Routing request with invalid SiteId  Ref: <a href="#">RouteRequest_Invalid_SiteId.xml</a>	Routing error response is received and saved in the specified directory. The XML has error condition code “100” and condition data “Validation Failure:Site Id is wrong”  <a href="#">RouteErrorResponse_Invalid_SiteId.xml</a>

### 3.5 Routing mandatory fields and field patterns

Please refer to section ‘*Routing Request*’ of [XMLServices6.3\\_Routing.pdf](#) for details of all mandatory fields and acceptable values for all Routing Request messages.

### 3.6 Warnings / Error messages returned in case of incorrect data

Please refer to section ‘*Routing Service*’ for specific region 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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