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## PROGRAMME & DEVELOPMENT SERVICES

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# XML Services

Ver 10.0.3

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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

- JDK 1.7

#### 1.1.3 Special Test Needs

- Access to XMLPI application with valid credential

### 1.2 DHLClient Installation

#### 1.2.1 Hardware

- Windows XP and above

#### 1.2.2 Software

- JDK 1.5 or above

#### 1.2.3 Special Test Needs

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

## 2 UNIT TEST REPORT

<b>Author</b>	MyDHL API team
<b>Program Name</b>	Capability and Quote service
<b>Functionality Tested</b>	Capability and Quote service
<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 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. <a href="#">Valid1_Capability_EUEU_MultipleBkgs_NonDutiable_Request.xml</a>	Valid Capability service - GetCapability response is received stored in the specified directory.  Note: this sample is having different Facility Code in response  Ref. <a href="#">Valid1_Capability_EUEU_MultipleBkgs_NonDutiable.xml</a>
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. <a href="#">Valid2_Capability_EUEU_DutiableProd_Request.xml</a>	Valid Capability service - GetCapability response is received stored in the specified directory.  Ref. <a href="#">Valid2_Capability_EUEU_DutiableProd.xml</a>
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. <a href="#">Valid3_Capability_EU_NonEU_Dutiable_Request.xml</a>	Valid Capability service - GetCapability response is received stored in the specified directory.  Ref. <a href="#">Valid3_Capability_EU_NonEU_Dutiable.xml</a>
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. <a href="#">Valid4_Capability_NonEU_EU_Dutiable_Request.xml</a>	Valid Capability service - GetCapability response is received stored in the specified directory.  Ref. <a href="#">Valid4_Capability_NonEU_EU_Dutiable.xml</a>
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. <a href="#">Valid5_Capability_NonEU_NonEU_DiffCountry_Dutiable_Request.xml</a>	Valid Capability GetCapability service - response is received stored in the specified directory.  Ref. <a href="#">Valid5_Capability_NonEU_NonEU_DiffCountry_Dutiable.xml</a>

Sl. No:	Condition to be Tested	Expected Result
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. <a href="#">Valid6_Capability_BRUS_Request.xml</a>	Valid Capability GetCapability service - response is received stored in the specified directory.  Ref. <a href="#">Valid6_Capability_BRUS.xml</a>
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. <a href="#">Valid7_Capability_AllServicesIndRes_Request.xml</a>	Valid Capability service - GetCapability response is received stored in the specified directory.  Ref. <a href="#">Valid7_Capability_AllServicesIndRes.xml</a>
8	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request which require additional pickup and delivery days  Ref. <a href="#">Valid8_Capability_PUDeliveryAddsDays_Request.xml</a>	Valid Capability service - GetCapability response is received stored in the specified directory.  Ref. <a href="#">Valid8_Capability_PUDeliveryAddsDays.xml</a>
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. <a href="#">Valid9_Quote_AP_PriceBreakdownRAS_Request.xml</a>	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. <a href="#">Valid9_Quote_AP_PriceBreakdownRAS.xml</a>
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. <a href="#">Valid10_Quote_EU_PriceBreakdownRAS_Request.xml</a>	Valid Quote service - GetQuote response is received stored in the specified directory.  Ref. <a href="#">Valid10_Quote_EU_PriceBreakdownRAS.xml</a>
11	Run the runDHLClient.cmd file to send a valid Quote service - GetQuote request with valid account number  Ref: <a href="#">Valid11_QuoteRequest_WithValidAccount.xml</a>	Valid Quote service - GetQuote response is received stored in the specified directory.  Ref: <a href="#">Valid11_QuoteResponse_WithValidAccount.xml</a>

## GetQuote request

Sl. No:	Condition to be Tested	Expected Result
12	Run the runDHLClient.cmd file to send a valid Quote service  Ref: <a href="#">Valid12_Quote_VolWeightHigher_Request.xml</a>	Valid Quote service - GetQuote response is received stored in the specified directory.  Ref: <a href="#">Valid12_QuoteResponse_VolWeightHigher.xml</a>
13	Run the runDHLClient.cmd file to send a valid Quotation service - request for Germany to Philippines for Dutiable products without account number, with additional new <RequestValueAddedServicesAndRuleGroups> to request for list of support value added services and its supported group.  Ref. <a href="#">Valid13_Quote_DEtoPH_ReqVASRuleGroups_Request.xml</a>	Valid Quote - GetQuote service - response is received stored in the specified directory.  Ref. <a href="#">Valid13_QuoteResponse_DEtoPH_ReqVASRuleGroups.xml</a>
14	Run the runDHLClient.cmd file to send a valid GetCapabilty service - request for Germany to Philippines shipment with request estimated delivery date type of 'QDDF'.  Ref. <a href="#">Valid14_Capability_DEtoPH_RequestEstimatedDeliveryDateQDDF_Request.xml</a>	Valid Quote - GetCapability service - response is received stored in the specified directory.  Ref. <a href="#">Valid14_Capability_DEtoPH_RequestEstimatedDeliveryDateQDDF_Response.xml</a>

### 3.2 Capability and Quote Service ( [Malformed XML Message](#) )

Sl. No:	Condition to be Tested	Expected Result
1	<p>Run the runDHLClient.cmd file to send a malformed Capability service - request e.g. remove the end tag &lt;/p:DCTRequest&gt;.</p> <p>Ref. <a href="#">Malformed1_Capability_EUEU_DutiableProd_Request.xml</a></p>	<p>Error response is received and stored in the specified directory. The XML has broken response containing java.lang.NullPointerException error.</p> <p>Ref. <a href="#">ErrorResponse_Malformed1_Capability_EUEU_DutiableProd.xml</a></p>

### 3.3 Capability and Quote Service ( [Invalid XML Message](#) )

Sl. No:	Condition to be Tested	Expected Result
1	<p>Run the runDHLClient.cmd file to send an invalid Capability service - request e.g. remove the 'MessageTime' element from the request XML.</p> <p>Ref. <a href="#">Invalid1_Capability_EU_NonEU_Dutiable_Request.xml</a></p>	<p>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: cvc-complex-type.2.4.a: Invalid content was found starting with element 'MessageReference'. One of '{MessageTime}' is expected. at line 6, column 3".</p> <p>Ref. <a href="#">ErrorResponse_Invalid1_Capability_EU_NonEU_Dutiable.xml</a></p>
2	<p>Run the runDHLClient.cmd file to send an invalid Capability service - request e.g. Removing all the elements of the From segment.</p> <p>Ref. <a href="#">Invalid2_Capability_NonEU_EU_Dutiable_Request.xml</a></p>	<p>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: cvc-complex-type.2.4.b: The content of element 'From' is not complete. One of '{CountryCode}' is expected. at line 17, column 16".</p> <p>Ref. <a href="#">ErrorResponse_Invalid2_Capability_NonEU_EU_Dutiable.xml</a></p>
3	<p>Run the runDHLClient.cmd file to send an invalid Quote service request with invalid account number.</p> <p>Ref: <a href="#">Invalid3_QuoteRequest_WithInvalidAccount.xml</a></p>	<p>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.</p> <p>Ref: <a href="#">ErrorResponse_Invalid3_QuoteResponse_WithInvalidAccount.xml</a></p>

### 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. <a href="#">Incorrect1_Capability_IncorrectOrigin_Request.xml</a>	Error response is received and stored in the specified directory. The XML has error 'The origin location is invalid. Please check the data.'  Ref. <a href="#">Incorrect1_Capability_IncorrectOrigin_Response.xml</a>
2	Run the runDHLClient.cmd file to send a valid Capability service - GetCapability request with invalid SiteID.  Ref. <a href="#">Incorrect2_Capability_EUEU_NonDutiable_Request.xml</a>	Error response is received and stored in the specified directory. The XML has error 'Validation Failure:Site Id is wrong'.  Ref. <a href="#">Incorrect2_Capability_EUEU_NonDutiable.xml</a>

### 3.5 Capability and Quote service - mandatory fields and field patterns

Please refer to section 'Capability and Quote Request' of [XMLPI10.0.4\\_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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