



DHL Sweden

DHL Book
Web Service Specification
Version 2.2

Updated 2016-05-16

Version history

Datum/version	Typ	Kommentar	Uppdat. av	Källa
2008-05-05 / Version 1.0	New document	New document.	Katharina Kronlund	Pdb
2008-10-16		Complemented with SOAP envelope.	Katharina Kronlund	Pdb
2010-03-19 / Version 2.0		Updated	Katharina Kronlund	Pdb
2016-02-25 / Version 2.1	URL update	Updated URLfor TEST.	Peter Karlsson	DHL
2016-05-16 / Version 2.2	URL update	Updated URLfor PROD.	Peter Karlsson	DHL

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1 Summary

This document describes how to communicate with the web service DHL Book. Target audience is integrators and system developers who will call and use the service.

2 Document versioning and status

This document will be versioned with a version number. Changes will be described in short in the Version history section.

3 General

The service is implemented using VB.NET 2005 and published as a Web Service.

3.1 Public endpoints

There's a test and a production version of the service. The table below shows the current URL's to the service.

TEST	https://www.dhltoolboxtest.se/DHLBookWS/Book.asmx
PRODUCTION	https://www.dhltoolbox.se/DHLBookWS/Book.asmx

The WSDL for each service can be retrieved by appending “?wsdl” at the end of the URL.

3.2 Security

The access to the web service will be restricted using Basic Authentication. User name and Password is sent as part of the HTTP request header

There is also a possibility to have a data access check using a passed user name and password. Depending on the user name and password different functions in the web service may be accessible. User name and password will be sent in clear text from the client to the service.

3.3 Error Handling

Errors will be encapsulated as exceptions. All errors will be logged by the service.

4 DHL Book operations

DHL Book Service manages booking of pickup requests in the main frame. This section describes the operations exposed by the service.

4.1 BookPickup operation

The operation books pickups.

Request:

BookPickup Request



Response:

BookPickup Response

4.1.1 BookPickup Request

Parameter	Message part	Required / Cardinality	Type / Length	Description
Credentials	Body	Yes	Credentials	An object of the class Service.Entities.Credentials
Booking	Body	Yes	tBook	An object of the class Service.Entities.tBook

4.1.2 BookPickup Response

Parameter	Message part	Type / Length	Description
BookResponse	Body	BookResponse	An object of the class Service.Entities.BookResponse

4.1.3 XML schema for Credentials

```
<xs:element name="Credentials">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="User" type="xs:string" maxOccurs="1" minOccurs="1" />
      <xs:element name="Password" type="xs:string" maxOccurs="1" minOccurs="1" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

4.1.4 XML schema for Booking

```
<xs:element name="Book" type="tBook" />
<xs:complexType name="tBook">
  <xs:sequence>
    <xs:choice id="BookType" maxOccurs="1" minOccurs="1">
      <xs:element name="General" type="tGeneral" />
      <xs:element name="GBook" type="tGBook" />
    </xs:choice>
  </xs:sequence>
</xs:complexType>
```

4.1.5 XML schema for BookResponse

```
<xs:element name="BookResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="BookNo" type="xs:string" />
      <xs:element name="StandardPickupAddressUsed" type="xs:boolean" />
      <xs:element name="PickupDate" type="xs:date" />
      <xs:element name="Message" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

4.2 GetStationDetails operation

The operation gets information for a station.

Request:

GetStationDetails Request



Response:

GetStationDetails Response



4.2.1 GetStationDetails Request

Parameter	Message part	Required / Cardinality	Type / Length	Description
Credentials	Body	Yes	Credentials	An object of the class Service.Entities.Credentials
StationId	Body	Yes	String	StationId of the station.

4.2.2 GetStationDetails Response

Parameter	Message part	Type / Length	Description
StationInfo	Body	StationInfo	An object of the class Service.Entities.StationInfo

4.2.3 XML schema for Credentials

```
<xs:element name="Credentials">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="User" type="xs:string" maxOccurs="1" minOccurs="1" />
      <xs:element name="Password" type="xs:string" maxOccurs="1" minOccurs="1" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

4.2.4 XML schema for StationInfo

```
<xs:element name="StationInfo">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Name" type="xs:string" />
      <xs:element name="StationNo" type="xs:string" />
      <xs:element name="Address" type="xs:string" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

<xs:element name="PostCode" type="xs:string" />
<xs:element name="City" type="xs:string" />
<xs:element name="CountryCode" type="xs:string" />
<xs:element name="FaxNo" type="xs:string" />
<xs:element name="PhoneNo" type="xs:string" />
<xs:element name="P_Giro" type="xs:string" />
<xs:element name="B_Giro" type="xs:string" />
<xs:element name="PalletDepotNo" type="xs:string" />
</xs:sequence>
</xs:complexType>
</xs:element>

```

5 Types

5.1 Credentials

Attribute	Required / Cardinality	Type / Length	Description
User	Yes	String	User: BookAppUser
Password	Yes	String	Password: BA%Pwd07

5.2 tBook

Attribute	Required / Cardinality	Type / Length	Description
General	Choice	tGeneral	Booking of type general.
GBook	Choice	tGBook	Booking of type guarantee service.

5.2.1 XML schema for General

```

<xs:complexType name="tGeneral">
  <xs:sequence>
    <xs:element name="CustomerID" type="tCustomerNo" maxOccurs="1" minOccurs="1" />
    <xs:element name="PickupDate" type="xs:date" maxOccurs="1" minOccurs="1" />
    <xs:element name="Note1" type="tNote" maxOccurs="1" minOccurs="0" />
    <xs:element name="Note2" type="tNote" maxOccurs="1" minOccurs="0" />
    <xs:element name="FreightNo" type="tFreightNo" maxOccurs="1" minOccurs="0" />
    <xs:element name="Weight" type="tWeight" maxOccurs="1" minOccurs="0" />
    <xs:element name="Volume" type="tVolume" maxOccurs="1" minOccurs="0" />
    <xs:element name="Loadingmeter" type="tLoadingmeter" maxOccurs="1" minOccurs="0" />
    <xs:element name="NoItems" type="tNoItems" maxOccurs="1" minOccurs="0" />
    <xs:element name="NoPallets" type="tNoPallets" maxOccurs="1" minOccurs="0" />
    <xs:element name="PalletPlace" type="tPalletPlace" maxOccurs="1" minOccurs="0" />
    <xs:element name="CustomerRef" type="tCustomerRef" maxOccurs="1" minOccurs="0" />
    <xs:element name="GoodsCode" type="tGoodsCode" maxOccurs="1" minOccurs="0" />
    <xs:element name="GoodsType" type="tGoodsType" maxOccurs="1" minOccurs="0" />
    <xs:element name="ProductCode" type="tProductCode" maxOccurs="1" minOccurs="0" />
    <xs:element name="FreightPayer" type="tCustomerNo" maxOccurs="1" minOccurs="1" />
    <xs:element name="Pickup" type="tPickup" maxOccurs="1" minOccurs="1" />
    <xs:element name="Delivery" type="tDelivery" maxOccurs="1" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

```

5.2.2 XML schema for GBook

```
<xs:complexType name="tGBook">
  <xs:sequence>
    <xs:element name="CustomerID" type="tCustomerNo" maxOccurs="1" minOccurs="1" />
    <xs:element name="PickupDate" type="xs:date" maxOccurs="1" minOccurs="1" />
    <xs:element name="Note1" type="tNote" maxOccurs="1" minOccurs="0" />
    <xs:element name="Note2" type="tNote" maxOccurs="1" minOccurs="0" />
    <xs:element name="FreightNo" type="tFreightNo" maxOccurs="1" minOccurs="0" />
    <xs:element name="Weight" type="tWeight" maxOccurs="1" minOccurs="0" />
    <xs:element name="Volume" type="tVolume" maxOccurs="1" minOccurs="0" />
    <xs:element name="Loadingmeter" type="tLoadingmeter" maxOccurs="1" minOccurs="0" />
    <xs:element name="NoItems" type="tNoItems" maxOccurs="1" minOccurs="0" />
    <xs:element name="NoPallets" type="tNoPallets" maxOccurs="1" minOccurs="0" />
    <xs:element name="PalletPlace" type="tPalletPlace" maxOccurs="1" minOccurs="0" />
    <xs:element name="Guarantee1" type="tGuarantee1" maxOccurs="1" minOccurs="1" />
    <xs:element name="Guarantee2" type="tGuarantee2" maxOccurs="1" minOccurs="1" />
    <xs:element name="CustomerRef" type="tCustomerRef" maxOccurs="1" minOccurs="1" />
    <xs:element name="GoodsCode" type="tGoodsCode" maxOccurs="1" minOccurs="0" />
    <xs:element name="GoodsType" type="tGoodsType" maxOccurs="1" minOccurs="0" />
    <xs:element name="ProductCode" type="tProductCode" maxOccurs="1" minOccurs="0" />
    <xs:element name="FreightPayer" type="tCustomerNo" maxOccurs="1" minOccurs="1" />
    <xs:element name="Pickup" type="tPickup" maxOccurs="1" minOccurs="1" />
    <xs:element name="GDelivery" type="tGDelivery" maxOccurs="1" minOccurs="1" />
  </xs:sequence>
</xs:complexType>
```

5.2.3 XML schemas for shared types

```
<xs:complexType name="tPickup">
  <xs:sequence>
    <xs:element name="Address" type="tAddressSE" maxOccurs="1" minOccurs="1" />
    <xs:element name="Contact" type="tPickupContact" maxOccurs="1" minOccurs="0" />
    <xs:element name="PhoneNo" type="tPhoneNo" maxOccurs="1" minOccurs="0" />
    <xs:element name="PickupTimeStart" type="xs:time" maxOccurs="1" minOccurs="0" />
    <xs:element name="PickupTimeStop" type="xs:time" maxOccurs="1" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="tDelivery">
  <xs:sequence>
    <xs:element name="Address" type="tAddressGeneric" maxOccurs="1" minOccurs="0" />
    <xs:element name="Contact" type="tDeliveryContact" maxOccurs="1" minOccurs="0" />
    <xs:element name="PhoneNo" type="tPhoneNo" maxOccurs="1" minOccurs="0" />
    <xs:element name="OpenHourStart" type="xs:time" maxOccurs="1" minOccurs="0" />
    <xs:element name="OpenHourStop" type="xs:time" maxOccurs="1" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="tGDelivery">
  <xs:sequence>
    <xs:element name="Address" type="tAddressSE" maxOccurs="1" minOccurs="1" />
    <xs:element name="Contact" type="tDeliveryContact" maxOccurs="1" minOccurs="0" />
    <xs:element name="PhoneNo" type="tPhoneNo" maxOccurs="1" minOccurs="0" />
    <xs:element name="OpenHourStart" type="xs:time" maxOccurs="1" minOccurs="0" />
    <xs:element name="OpenHourStop" type="xs:time" maxOccurs="1" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="tAddressSE">
  <xs:sequence>
    <xs:element name="Name" type="tName" maxOccurs="1" minOccurs="1" />
    <xs:element name="AddressLine" type="tAddressLine" maxOccurs="1" minOccurs="1" />
    <xs:element name="PostCode" type="tPostCodeSE" maxOccurs="1" minOccurs="1" />
    <xs:element name="City" type="tCity" maxOccurs="1" minOccurs="1" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="tAddressGeneric">
```



```
<xs:sequence>
  <xs:element name="Name" type="tName" maxOccurs="1" minOccurs="1" />
  <xs:element name="AddressLine" type="tAddressLine" maxOccurs="1" minOccurs="0" />
  <xs:element name="PostCode" type="tPostCode" maxOccurs="1" minOccurs="0" />
  <xs:element name="City" type="tCity" maxOccurs="1" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="tCustomerNo">
  <xs:restriction base="xs:string">
    <xs:pattern value="\d{6}" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tName">
  <xs:restriction base="xs:string">
    <xs:maxLength value="30" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tAddressLine">
  <xs:restriction base="xs:string">
    <xs:maxLength value="25" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tCity">
  <xs:restriction base="xs:string">
    <xs:maxLength value="15" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tPostCodeSE">
  <xs:restriction base="xs:string">
    <xs:pattern value="\d{5}" />
    <xs:maxLength value="5" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tPostCode">
  <xs:restriction base="xs:string">
    <xs:maxLength value="5" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tPickupContact">
  <xs:restriction base="xs:string">
    <xs:maxLength value="35" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tDeliveryContact">
  <xs:restriction base="xs:string">
    <xs:maxLength value="25" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tPhoneNo">
  <xs:restriction base="xs:string">
    <xs:maxLength value="20" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tNote">
  <xs:restriction base="xs:string">
    <xs:maxLength value="60" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tFreightNo">
  <xs:restriction base="xs:string">
    <xs:pattern value="\d{10}" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tCustomerRef">
  <xs:restriction base="xs:string">
    <xs:maxLength value="35" />
  </xs:restriction>
</xs:simpleType>
```

```
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="tGoodsCode">
  <xs:restriction base="xs:string">
    <xs:maxLength value="5" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tGoodsType">
  <xs:restriction base="xs:string">
    <xs:maxLength value="30" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tProductCode">
  <xs:restriction base="xs:string">
    <xs:maxLength value="3" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tWeightValue">
  <xs:restriction base="xs:nonNegativeInteger">
    <xs:minInclusive value="1" />
    <xs:maxInclusive value="999999" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tWeightUnit">
  <xs:restriction base="xs:string">
    <xs:enumeration value="kg" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="tWeight">
  <xs:simpleContent>
    <xs:extension base="tWeightValue">
      <xs:attribute name="unit" type="tWeightUnit" use="required" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="tVolumeValue">
  <xs:restriction base="xs:decimal">
    <xs:minInclusive value="0.1" />
    <xs:maxInclusive value="399.99" />
    <xs:fractionDigits value="2" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tVolumeUnit">
  <xs:restriction base="xs:string">
    <xs:enumeration value="m3" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="tVolume">
  <xs:simpleContent>
    <xs:extension base="tVolumeValue">
      <xs:attribute name="unit" type="tVolumeUnit" use="required" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="tLoadingmeterValue">
  <xs:restriction base="xs:decimal">
    <xs:minInclusive value="0.1" />
    <xs:maxInclusive value="66.69" />
    <xs:fractionDigits value="2" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tLoadingmeterUnit">
  <xs:restriction base="xs:string">
    <xs:enumeration value="m" />
  </xs:restriction>
</xs:simpleType>
```

```
<xs:complexType name="tLoadingmeter">
  <xs:simpleContent>
    <xs:extension base="tLoadingmeterValue">
      <xs:attribute name="unit" type="tLoadingmeterUnit" use="required" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="tPalletPlaceValue">
  <xs:restriction base="xs:decimal">
    <xs:minInclusive value="0.1" />
    <xs:maxInclusive value="999.99" />
    <xs:fractionDigits value="2" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tPalletPlaceUnit">
  <xs:restriction base="xs:string">
    <xs:enumeration value="" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="tPalletPlace">
  <xs:simpleContent>
    <xs:extension base="tPalletPlaceValue">
      <xs:attribute name="unit" type="tPalletPlaceUnit" use="required" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="tNoItems">
  <xs:restriction base="xs:nonNegativeInteger">
    <xs:minInclusive value="1" />
    <xs:maxInclusive value="999" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tNoPallets">
  <xs:restriction base="xs:nonNegativeInteger">
    <xs:minInclusive value="1" />
    <xs:maxInclusive value="999" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tGuarantee1">
  <xs:restriction base="xs:NMTOKEN">
    <xs:enumeration value="07" />
    <xs:enumeration value="10" />
    <xs:enumeration value="12" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="tGuarantee2">
  <xs:restriction base="xs:NMTOKEN">
    <xs:enumeration value="S" />
    <xs:enumeration value="E" />
  </xs:restriction>
</xs:simpleType>
```

6 Request example

6.1 BookPickup SOAP:Envelope

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <BookPickup xmlns="http://tempuri.org/">
      <Credentials xmlns="http://www.dhl.se/schCredentials.xsd">
        <User>XXXX</User>
        <Password>XXXX</Password>
      </Credentials>
      <Book xmlns="http://www.dhl.se/schBook.xsd">
        <RequestMessageHeader>
          <Environment>Book</Environment>
          <MessageId>6b1020ef-cd4a-48b3-b80a-b0b9bad57d27</MessageId>
          <RequestingSystem>TestApp</RequestingSystem>
          <TimeStamp>2008-10-16T16:18:00.9769394+02:00</TimeStamp>
        </RequestMessageHeader>
        <General>
          <CustomerID>XXXXXX</CustomerID>
          <PickupDate>2010-05-01</PickupDate>
          <Note1 />
          <Note2 />
          <FreightNo />
          <Weight unit="kg">5</Weight>
          <Volume unit="m3">1</Volume>
          <Loadingmeter unit="m">1</Loadingmeter>
          <NoItems>1</NoItems>
          <NoPallets>1</NoPallets>
          <PalletPlace unit="">2</PalletPlace>
          <CustomerRef>test</CustomerRef>
          <GoodsCode />
          <GoodsType />
          <ProductCode>201</ProductCode>
          <Pickup>
            <Address>
              <Name>Gränsfors bruks AB</Name>
              <AddressLine>Stationsgatan</AddressLine>
              <PostCode>82077</PostCode>
              <City>Gnarp</City>
            </Address>
            <Contact>Kalle</Contact>
            <PhoneNo>12345</PhoneNo>
          </Pickup>
          <Delivery>
            <Address>
              <Name>Testkund</Name>
              <AddressLine>Testgatan</AddressLine>
              <PostCode>56432</PostCode>
              <City>Bankeryd</City>
            </Address>
            <Contact>Pelle</Contact>
            <PhoneNo>54321</PhoneNo>
          </Delivery>
        </General>
      </Book>
    </BookPickup>
  </soap:Body>
</soap:Envelope>
```