# D&H Canada Customer XML Integration

## DH.IS.WEB.XML.2

September 6, 2016

A reference detailing the intended methods for customer XML integrations with D&H. The contents of this manual are intended for the use of Canada D&H customers only. This document should be distributed in its entirety.

# Summary of Changes

| Date | Change |
|------|--------|
| 09/06/2016 | Order Status Response - <XMLRESPONSE> - <MESSAGE> - Contents<br>Order Status Response - <XMLRESPONSE> - <ORDERSTATUS> - <PACKAGE> - Contents |
| | |
| | |
| | |

# Contents

# XML Integration

D&H's XML integration functions as an extension of DandH.ca. Account management is handled via account management through DandH.ca.

# Terminology

- **Account**: Company's 10-digit reference number within D&H systems.
- **Subaccount**: A 10-digit account number derived from the company's main account. Shares the same 6-digit (AcctNoAR) reference number as the main account.
- **UserCode**: Used to describe the username, userid, login name etc…. used to authenticate access to DandH.ca.
- **PO**: (Purchase Order) refers to the purchase order number assigned to an order by the customer. For XML requests, this number must be unique per account.
- **Spawned Order**: A separate order created from an original order due to shipments from different branch or backorder.

# Submission Methods

There are 3 methods that can be used to post the document to D&H

1. **HTTP POST**
2. **HTML form POST**
   a. Create an HTTP POST request containing a form field named "xmlDoc", and include your XML document as the value of the "xmlDoc" field.
3. **SOAP**
   a. Enclose your XML document in a SOAP envelope.

   **Submit Canada requests to this URL:** https://www.dandh.ca/dhXML/xmlDispatch

# Implementation

**General**

- The messages that can be returned as a result of an XML request vary and are subject to change without notice. Elements and values that can be programmatically written to are provided within Specifications.
- Malformed or unparsable XML errors are often the result of invalid special characters or byte order marks (BOM) embedded within XML requests.

**Order Entry**

- Addresses that exceed the element size as listed in Specifications shall appear truncated on shipping labels.
- If the <SHIPTOADDRESS> element is empty or not included, orders will be shipped to the default shipping address on the account.
- For accounts that have dropship permissions, if the <SHIPTOADDRESS> element contains a valid value, the order will be drop shipped to this address, provided valid <SHIPTOCITY>, <SHIPTOPROVINCE>, and <SHIPTOPOSTALCODE> elements are provided.

**Order Status**

- Backordered items generate an additional <ORDERSTATUS> element. The initial <ORDERSTATUS> on order receipt spawns additional order number(s) for backordered items. For <ORDERSTATUS> elements containing <INVTOTAL> element values of 0 and <QTYBO> element values greater than 0, refer to spawned order numbers.

**Shipping**

- Customers that wish to have an order shipped LTL should specify so in the <REMARKS> element. This will force the order to stop with the sales representative to be modified. To ship LTL on a continuous basis, a new subaccount should be created and configured to default ship LTL. Orders placed under the subaccount would automatically ship LTL.
- Ship via is the combination of <SHIPCARRIER> and <SHIPSERVICE> elements.
- When <ONLYBRANCH> and <BRANCH> are not specified, Best Branch Logic will be utilized, based on the Ship-To address, to determine the distribution center to ship the order.

# Specifications

The examples included in this document are meant to serve as a guide, and do not represent all of the possible variations of request submissions or responses.

**XML Request Data Types**
- String
- Integer
- Logical (Boolean)
- Complex (Contain child elements)

**XML Request Conditions**
- Required: The element must be included.
- Optional: The element does not need to be included or only needs to be included when certain criteria are met.
- Option: One of multiple possible elements is required, dependent on the nature of the request.

**Failure Response**
All XML requests return the same failure response format (Figure 1).

```
<?xml version="1.0" encoding="UTF-8" ?>
<XMLRESPONSE>
  <STATUS>failure</STATUS>
  <MESSAGE>{Request failure message}</MESSAGE>
</XMLRESPONSE>
```
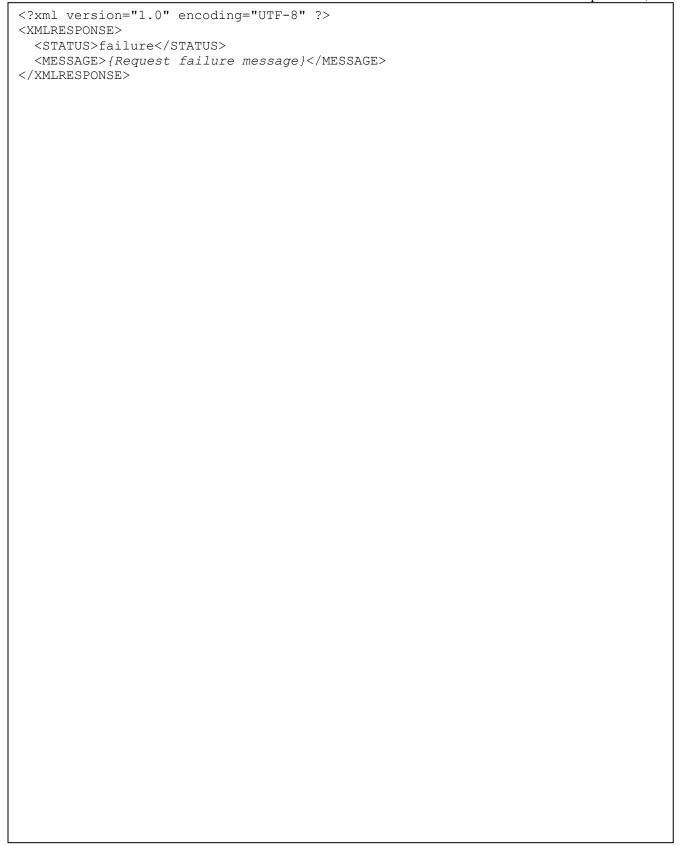
Figure 1 – Standard Request Failure Response

## Price and Availability Request

Price and/or Availability requests are made to receive real-time item prices and/or inventory availability. Requests may be submitted for price only, availability only, or combined price and availability. Multiple item numbers may be submitted per request. (Figures 2 thru 4)

<XMLFORMPOST>
       Condition: Required
       Parent: None
       Type: Complex
       Size: N/A
       Contents: Elements:
              <REQUEST>
              <LOGIN>
              <PARTNUM>

<REQUEST>
       Condition: Required
       Parent: <XMLFORMPOST>
       Type: String
       Size: 25
       Valid Values: 'price', 'availability', 'price-availability'
       Contents: The type of request.
              'price' returns price only
              'availability' returns available quantity only
              'price-availability' returns both

<LOGIN>
       Condition: Required
       Parent: <XMLFORMPOST>
       Type: Complex
       Size: N/A
       Contents: Elements:
              <USERID>
              <PASSWORD>

<USERID>
       Condition: Required
       Parent: <LOGIN>
       Type: String
       Size: 50
       Contents: DandH.com/ DandH.ca UserCode

<PASSWORD>
       Condition: Required
       Parent: <LOGIN>
       Type: String
       Size: 30
       Contents: The password associated with UserCode

<PARTNUM>
       Condition: Required
       Parent: <XMLFORMPOST>
       Type: String
       Size: 15
       Contents: The D&H item number for which information is being requested. This element may occur up to 50 times for separate price or availability requests, or up to 25 times for combined price-availability.

```
<!DOCTYPE html>
<html>
  <head>
    <title>D&H Price and Availability Request</title>
  </head>
  <body onLoad="document.forms[0].submit()">
    <div align="center">
      <form method="post" action="https://www.dandh.ca/dhXML/xmlDispatch">
        <input type="hidden" name="xmlDoc"
          value="<XMLFORMPOST>
                  <REQUEST>price-availability</REQUEST>
                  <LOGIN>
                    <USERID>{UserCode}</USERID>
                    <PASSWORD>{Password}</PASSWORD>
                  </LOGIN>
                  <PARTNUM>STYLUSCOLOR880</PARTNUM>
                </XMLFORMPOST>" />
      </form>
    </div>
  </body>
</html>
```

Figure 2 – Canada Price and Availability Request HTML Form Post on Document Load

```
<!DOCTYPE html>
<html>
  <head>
    <title>D&H Availability Request</title>
  </head>
  <body>
    <div align="center">
      <form method="post" action="https://www.dandh.ca/dhXML/xmlDispatch">
        <input type="hidden" name="xmlDoc"
          value="<XMLFORMPOST>
                  <REQUEST>availability</REQUEST>
                  <LOGIN>
                    <USERID>{UserCode}</USERID>
                    <PASSWORD>{Password}</PASSWORD>
                  </LOGIN>
                  <PARTNUM>52T</PARTNUM>
                  <PARTNUM>STYLUSCOLOR880</PARTNUM>
                </XMLFORMPOST>" />
        <input type="submit" value="Submit Availability Request" />
      </form>
    </div>
  </body>
</html>
```

Figure 3 – Canada Availability Request HTML Form Post

```
var DataToSend = '<?xml version="1.0" encoding="UTF-8"?>' +
'<SOAP-ENV:Envelope   xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">' +
'<SOAP-ENV:Body>' +
'<XMLFORMPOST>' +
'<REQUEST>price</REQUEST>' +
'<LOGIN>' +
'<USERID>{UserCode}</USERID>' +
'<PASSWORD>{Password}</PASSWORD>' +
'</LOGIN>' +
'<PARTNUM>52T</PARTNUM>' +
'<PARTNUM>STYLUSCOLOR880</PARTNUM>' +
'</XMLFORMPOST>' +
'</SOAP-ENV:Body>' +
'</SOAP-ENV:Envelope>';

var xmlhttp = new ActiveXObject("Microsoft.XMLHTTP");
xmlhttp.Open("POST","https://www.dandh.ca/dhXML/xmlDispatch",false);
xmlhttp.setRequestHeader("Content-Type", "text/xml");
xmlhttp.setRequestHeader("SOAPAction","urn:x-progress-soap-1.0:asbroker1#");
xmlhttp.send(DataToSend);
```

Figure 4 – Canada Price Request SOAP Envelope in JavaScript

## Price and Availability Response

Price and/or Availability responses contain the information requested from a Price and/or Availability Request. The response will contain an <ITEM> element for each <PARTNUM> element that was enclosed in the request. (Figures 5 thru 8)

<XMLRESPONSE>
      Parent: None
      Type: Complex
      Contents: Elements:
            <ITEM>
            <STATUS>
            <MESSAGE>

<ITEM>
      Parent: <XMLRESPONSE>
      Type: Complex
      Contents: Elements:
            <PARTNUM>
            <UNITPRICE> (price requests)
            <BRANCHQTY> (availability requests)
            <TOTALQTY> (availability requests)
            <MESSAGE>

<PARTNUM>
      Parent: <ITEM>
      Type: String
      Contents: The D&H item number.

<UNITPRICE>
      Parent: <ITEM>
      Type: Decimal
      Contents: The item price.

<BRANCHQTY>
      Parent: <ITEM>
      Type: Complex
      Contents: Elements:
            <BRANCH>
            <QTY>
            <INSTOCKDATE>

<BRANCH>
      Parent: <BRANCHQTY>
      Type: String
      Contents: The D&H distribution center name.

<QTY>
      Parent: <BRANCHQTY>
      Type: Integer
      Contents: The quantity in stock at the specified distribution center.

<INSTOCKDATE>
      Parent: <BRANCHQTY>
      Type: String
      Contents: For items that are out of stock, the expected in stock date, if available.

<TOTALQTY>
      Parent: <ITEM>
      Type: Integer
      Contents: The sum in stock quantity of all branches.

<MESSAGE>
      Parent: <ITEM>
      Type: String
      Contents: Any item level error messages.

<STATUS>
      Parent: <XMLRESPONSE>
      Type: String
      Contents: 'success' or 'failure'
            If 'success', <XMLRESPONSE> will contain <ITEM>.
            If 'failure', <XMLRESPONSE> will contain <MESSAGE>.

<MESSAGE>
      Parent: <XMLRESPONSE>
      Type: String
      Contents: Error message or notification regarding request failure.

```
<?xml version="1.0" encoding="UTF-8" ?>
<XMLRESPONSE>
  <ITEM>
    <PARTNUM>52T</PARTNUM>
    <UNITPRICE>6.63</UNITPRICE>
    <BRANCHQTY>
      <BRANCH>Toronto</BRANCH>
      <QTY>17</QTY>
      <INSTOCKDATE />
    </BRANCHQTY>
    <TOTALQTY>17</TOTALQTY>
  </ITEM>
  <ITEM>
    <PARTNUM>STYLUSCOLOR880</PARTNUM>
    <UNITPRICE>75.48</UNITPRICE>
    <BRANCHQTY>
      <BRANCH>Toronto</BRANCH>
      <QTY>0</QTY>
      <INSTOCKDATE>01/15/11</INSTOCKDATE>
    </BRANCHQTY>
    <TOTALQTY>0</TOTALQTY>
  </ITEM>
  <STATUS>success</STATUS>
</XMLRESPONSE>
```

Figure 5 – Canada Price and Availability Response

```
<?xml version="1.0" encoding="UTF-8" ?>
<XMLRESPONSE>
  <ITEM>
    <PARTNUM>52T</PARTNUM>
    <UNITPRICE>6.63</UNITPRICE>
  </ITEM>
  <ITEM>
    <PARTNUM>STYLUSCOLOR880</PARTNUM>
    <UNITPRICE>75.48</UNITPRICE>
  </ITEM>
  <STATUS>success</STATUS>
</XMLRESPONSE>
```

Figure 6 – Price Response

```
<?xml version="1.0" encoding="UTF-8" ?>
<XMLRESPONSE>
  <ITEM>
    <PARTNUM>52T</PARTNUM>
      <BRANCH>Toronto</BRANCH>
      <QTY>203</QTY>
      <INSTOCKDATE />
    </BRANCHQTY>
    <TOTALQTY>203</TOTALQTY>
  </ITEM>
  <STATUS>success</STATUS>
</XMLRESPONSE>
```

Figure 7 – Canada Availability Response

```
<?xml version="1.0" encoding="UTF-8" ?>
<XMLRESPONSE>
  <ITEM>
    <PARTNUM>123ABC</PARTNUM>
    <MESSAGE>{Item level failure message}</MESSAGE>
  </ITEM>
  <STATUS>success</STATUS>
</XMLRESPONSE>
```

Figure 8 – Price and Availability Response: Item Level Failure

## Order Entry Request

Order Entry requests are made to submit orders. Multiple items may be submitted per request by including an <ITEM> element for each item within the <ORDERITEMS> element. For drop ship authorized accounts, if <SHIPTO•> elements are used, the order will be drop shipped to the address specified; otherwise orders will default to the shipping address on file. *Certain <SHIPTO•> elements are required for drop shipping. (Figure 9)

<XMLFORMPOST>
    Condition: Required
    Parent: None
    Type: Complex
    Size: N/A
    Contents:  Elements
        <REQUEST>
        <LOGIN>
        <ORDERHEADER>
        <ORDERITEMS>

<REQUEST>
    Condition: Required
    Parent: <XMLFORMPOST>
    Type: String
    Size: 25
    Valid Values: 'orderEntry'
    Contents: The type of request.

<LOGIN>
    Condition: Required
    Parent: <XMLFORMPOST>
    Type: Complex
    Size: N/A
    Contents: Elements
        <USERID>
        <PASSWORD>

<USERID>
    Condition: Required
    Parent: <LOGIN>
    Type: String
    Size: 50
    Contents: DandH.com/ DandH.ca UserCode

<PASSWORD>
    Condition: Required
    Parent: <LOGIN>
    Type: String
    Size: 30
    Contents: The password associated with UserCode

<ORDERHEADER>
    Condition: Required
    Parent: <XMLFORMPOST>
    Type: Complex
    Size: N/A
    Contents: Elements:
        <PONUM>
        <SHIPCARRIER>
        <SHIPSERVICE>
        <ONLYBRANCH>
        <PARTSHIPALLOW>
        <BACKORDERALLOW>
        <DROPSHIPPW>
        <SHIPTONAME>
        <SHIPTOATTN>
        <SHIPTOADDRESS>
        <SHIPTOADDRESS2>
        <SHIPTOCITY>
        <SHIPTOPROVINCE>
        <SHIPTOPOSTALCODE>
        <REMARKS>

<PONUM>
    Condition: Required
    Parent: <ORDERHEADER>
    Type: String
    Size: 30
    Contents: The unique Purchase Order number for the order. May not be duplicated with any other order from the account.

<SHIPCARRIER>
    Condition: Required
    Parent: <ORDERHEADER>
    Type: String
    Size: 9
    Valid Values: 'Pickup', 'UPS', 'Purolator'
    Contents: The Ship Via carrier preference.

<SHIPSERVICE>
    Condition: Required
    Parent: <ORDERHEADER>
    Type: String
    Size: 12
    Valid Values: 'Pickup', 'Ground', '2nd Day Air', 'Next Day Air'
    Contents: The Ship Via service level.

\<ONLYBRANCH\>
  Condition: Optional
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 15
  Valid Values: 'Toronto'
  Contents: The Only D&H branch to ship the entire order from. This element will be overridden by the \<BRANCH\> element at the item detail level.

\<PARTSHIPALLOW\>
  Condition: Optional
  Parent: \<ORDERHEADER\>
  Type: Logical
  Size: 1
  Valid Values: 'Y', 'N'
  Contents: Determines whether to allow partial shipments. The default allows for partial shipments when all items and quantities contained in an order are not available at a specific distribution center. 'N' will prevent partial shipments. Combined with \<BACKORDERALLOW\> could cause orders to be cancelled in the event they cannot be completed as desired.

\<BACKORDERALLOW\>
  Condition: Optional
  Parent: \<ORDERHEADER\>
  Type: Logical
  Size: 1
  Valid Values: 'Y', 'N'
  Contents: Determines whether items that are not available are to be backordered. The default allows for items to be backordered when unavailable. 'N' will prevent items from being backordered. Combined with \<PARTSHIPALLOW\> could cause orders to be cancelled in the event they cannot be completed as desired.

\<DROPSHIPPW\>
  Condition: Optional
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 30
  Contents: If a drop ship password is assigned to the account, this element becomes required for drop ship orders. Drop ship authorized accounts only.

\<SHIPTOADDRESS\>
  Condition: Optional*
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 30
  Contents: The street address shipped to Drop ship authorized accounts only.

\<SHIPTOADDRESS2\>
  Condition: Optional
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 30
  Contents: Additional field provided for the street address being shipped to. Drop ship authorized accounts only.

\<SHIPTONAME\>
  Condition: Optional*
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 25
  Contents: The Ship-To name. Drop ship authorized accounts only.

\<SHIPTOATTN\>
  Condition: Optional
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 30
  Contents: The Ship-To attention line. Drop ship authorized accounts only.

\<SHIPTOCITY\>
  Condition: Optional*
  Parent: \<ORDERHEADER\>
  Type: String
  Size: 18
  Contents: The Ship-To city. Drop ship authorized accounts only.

\<SHIPTOPROVINCE\>
  Condition: Optional*
  Parent \<ORDERHEADER\>
  Type: String
  Size: 2
  Valid Values: Must be a valid USPS two character province code.
  Contents: The Ship-To province. Drop ship authorized accounts only.

&lt;SHIPTOPOSTALCODE&gt;

    Condition: Optional*
    Parent: &lt;ORDERHEADER&gt;
    Type: String
    Size: 10
    Valid Values: The six (6) characters, space
    separated postal code.
    Contents: The Ship-To postal code. Drop ship
    authorized accounts only.

&lt;REMARKS&gt;

    Condition: Optional
    Parent: &lt;ORDERHEADER&gt;
    Type: String
    Size: 58
    Contents: Any special instructions regarding the
    order. Any entry in this element will cause the
    order to be placed in "On Hold" status awaiting
    sales representative processing.

&lt;ORDERITEMS&gt;

    Condition: Required
    Parent: &lt;XMLFORMPOST&gt;
    Type: Complex
    Size: N/A
    Contents: Elements:
        &lt;ITEM&gt;

&lt;ITEM&gt;

    Condition: Required
    Parent: &lt;ORDERITEMS&gt;
    Type: Complex
    Size: N/A
    Contents: Elements:
        &lt;PARTNUM&gt;
        &lt;QTY&gt;
        &lt;BRANCH&gt;
        &lt;PRICE&gt;

&lt;PARTNUM&gt;

    Condition: Required
    Parent: &lt;ITEM&gt;
    Type: String
    Size: 15
    Contents: The D&amp;H item number being ordered.

&lt;QTY&gt;

    Condition: Required
    Parent: &lt;ITEM&gt;
    Type: Integer
    Size: 5
    Contents: The requested quantity of the item
    being ordered.

&lt;BRANCH&gt;

    Condition: Optional
    Parent: &lt;ITEM&gt;
    Type: String
    Size: 15
    Valid Values: 'Toronto'
    Contents: The only D&amp;H Branch to ship the line
    item from. This element will override the value
    of the header level &lt;ONLYBRANCH&gt; element.

&lt;PRICE&gt;

    Condition: Optional
    Parent: &lt;ITEM&gt;
    Type: Decimal
    Size: N/A
    Contents: Only available to select customers.
    The customer requested item price.

```html
<!DOCTYPE html>
<html>
  <head>
    <title>D&H Order Entry Request</title>
  </head>
  <body>
    <div align="center">
      <form method="post" action="https://www.dandh.ca/dhXML/xmlDispatch">
        <input type="hidden" name="xmlDoc"
          value="<XMLFORMPOST>
                   <REQUEST>orderEntry</REQUEST>
                   <LOGIN>
                     <USERID>{UserCode}</USERID>
                     <PASSWORD>{Password}</PASSWORD>
                   </LOGIN>
                   <ORDERHEADER>
                     <ONLYBRANCH></ONLYBRANCH>
                     <PARTSHIPALLOW>N</PARTSHIPALLOW>
                     <BACKORDERALLOW>N</BACKORDERALLOW>
                     <DROPSHIPPW>{Dropship Password}</DROPSHIPPW>
                     <SHIPTONAME>{Dropship Name}</SHIPTONAME>
                     <SHIPTOATTN>{Dropship Attention}</SHIPTOATTN>
                     <SHIPTOADDRESS>{Dropship Street Address}</SHIPTOADDRESS>
                     <SHIPTOADDRESS2>{Dropship Address Line 2}</SHIPTOADDRESS2>
                     <SHIPTOCITY>{Dropship City}</SHIPTOCITY>
                     <SHIPTOPROVINCE>{Dropship Province}</SHIPTOPROVINCE>
                     <SHIPTOPOSTALCODE>{Dropship Postal Code}</SHIPTOPOSTALCODE>
                     <SHIPCARRIER>{Shipping Carrier}</SHIPCARRIER>
                     <SHIPSERVICE>{Shipping Service Level}</SHIPSERVICE>
                     <PONUM>{Purchase Order Number}</PONUM>
                     <REMARKS>{Order Remarks}</REMARKS>
                   </ORDERHEADER>
                   <ORDERITEMS>
                     <ITEM>
                       <PARTNUM>STYLUSCOLOR880</PARTNUM>
                       <QTY>5</QTY>
                       <BRANCH>Toronto</BRANCH>
                     </ITEM>
                     <ITEM>
                       <PARTNUM>52T</PARTNUM>
                       <QTY>1</QTY>
                     </ITEM>
                   </ORDERITEMS>
                 </XMLFORMPOST>" />
        <input type="submit" value="Submit Order Entry Request" />
      </form>
    </div>
  </body>
</html>
```

Figure 9 – Canada Order Entry Request HTML Form Post

## Order Entry Response

Order Entry response will return the order number on successful submission, or an error message on submission failure.
(Figure 10)

&lt;XMLRESPONSE&gt;
        Parent: None
        Type: Complex
        Contents: Elements:
                &lt;STATUS&gt;
                &lt;MESSAGE&gt;
                &lt;ORDERNUM&gt;

&lt;STATUS&gt;
        Parent: &lt;XMLRESPONSE&gt;
        Type: String
        Contents: 'success' or 'failure'
                If 'success', &lt;XMLRESPONSE&gt; will
                contain &lt;ORDERNUM&gt;.
                If 'failure', &lt;XMLRESPONSE&gt; will
                contain &lt;MESSAGE&gt;.

&lt;MESSAGE&gt;
        Parent: &lt;XMLRESPONSE&gt;
        Type: String
        Contents: Error message or notification
        regarding request failure.

&lt;ORDERNUM&gt;
        Parent: &lt;XMLRESPONSE&gt;
        Type: Integer
        Contents: The D&H order number assigned

```
<?xml version="1.0" encoding="utf-8"?>
<XMLRESPONSE>
  <ORDERNUM>5005560</ORDERNUM>
  <STATUS>success</STATUS>
</XMLRESPONSE>
```

Figure 10 – Order Entry Response

# Order Status Request

Order Status requests are made to return information on previously submitted orders. Multiple status requests may be made by including multiple <STATUSREQUEST> elements. (Figure 11)

<XMLFORMPOST>
       Condition: Required
       Parent: None
       Type: Complex
       Size: N/A
       Contents: Elements:
              <REQUEST>
              <LOGIN>
              <STATUSREQUEST>

<REQUEST>
       Condition: Required
       Parent: <XMLFORMPOST>
       Type: String
       Size: 25
       Valid Values: 'orderStatus'
       Contents: The type of request.

<LOGIN>
       Condition: Required
       Parent: <XMLFORMPOST>
       Type: Complex
       Size: N/A
       Contents: Elements:
              <USERID>
              <PASSWORD>

<USERID>
       Condition: Required
       Parent: <LOGIN>
       Type: String
       Size: 50
       Contents: DandH.com/ DandH.ca UserCode

<PASSWORD>
       Condition: Required
       Parent: <LOGIN>
       Type: String
       Size: 30
       Contents: The password associated with UserCode

<STATUSREQUEST>
       Condition: Required
       Parent: <XMLFORMPOST>
       Type: Complex
       Size: N/A
       Contents: Only one of these child elements may be included per each <STATUSREQUEST>, up to 50 <STATUSREQUEST> elements may be included in <XMLFORMPOST>.
              <PONUM>
              <ORDERNUM>
              <INVOICE>

<PONUM>
       Condition: Option
       Parent: <STATUSREQUEST>
       Type: String
       Size: 50
       Contents: To return the status of orders matching a PO number, include this element containing the unique Purchase Order number.

<ORDERNUM>
       Condition: Option
       Parent: <STATUSREQUEST>
       Type: String
       Size: 50
       Contents: To return the status of orders matching a D&H order number, include this element containing the D&H order number.

<INVOICE>
       Condition: Option
       Parent: <STATUSREQUEST>
       Type: String
       Size: 50
       Contents: To return the status of orders matching a D&H invoice number, include this element containing the D&H invoice number.

```
<!DOCTYPE html>
<html>
  <head>
    <title>D&H Order Status Request</title>
  </head>
  <body>
    <div align="center">
      <form method="post" action="https://www.dandh.ca/dhXML/xmlDispatch">
        <input type="hidden" name="xmlDoc"
          Value="<XMLFORMPOST>
                  <REQUEST>orderStatus</REQUEST>
                  <LOGIN>
                    <USERID>{UserCode}</USERID>
                    <PASSWORD>{Password}</PASSWORD>
                  </LOGIN>
                  <STATUSREQUEST>
                    <PONUM>{PO Number}</PONUM>
                  </STATUSREQUEST>
                  <STATUSREQUEST>
                    <ORDERNUM>{D&H Order Number}</ORDERNUM>
                  </STATUSREQUEST>
                  <STATUSREQUEST>
                    <INVOICE>{D&H Invoice Number}</INVOICE>
                  </STATUSREQUEST>
                </XMLFORMPOST>" />
        <input type="submit" value="Submit Order Status Request" />
      </form>
    </div>
  </body>
</html>
```
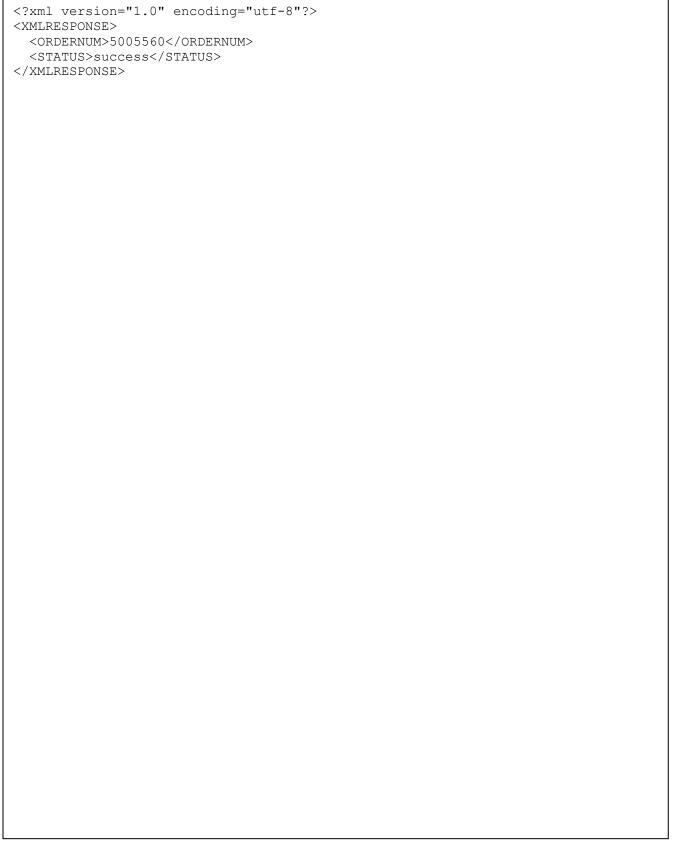
Figure 11 – Canada Order Status Request HTML Form Post

# Order Status Response

Order Status responses contain the information requested from an Order Status Request. The response will contain an <ORDERSTATUS> element for each Order/Branch combination tasked to fulfill the order. There may be multiple <ORDERSTATUS> elements for each <STATUSREQUEST> submitted. (Figure 12)

<XMLRESPONSE>
    Parent: None
    Type: Complex
    Contents: Elements
        <STATUS>
        <MESSAGE>
        <ORDERSTATUS>

<ORDERSTATUS>
    Parent: <XMLRESPONSE>
    Type: Complex
    Contents: Elements
        <DATE>
        <PONUM>
        <BRANCH>
        <ORDERNUM>
        <INVOICE>
        <INVTOTAL>
        <MESSAGE>
        <SOLDTO>
        <SHIPTO>
        <ORDERDETAIL>
        <PACKAGE>

<DATE>
    Parent: <ORDERSTATUS>
    Type: String
    Contents: The order date.

<BRANCH>
    Parent: <ORDERSTATUS>
    Type: String
    Contents: The D&H branch the order will be shipped from.

<PONUM>
    Parent: <ORDERSTATUS>
    Type: String
    Contents: The Purchase Order number for the order.

<ORDERNUM>
    Parent: <ORDERSTATUS>
    Type: Integer
    Contents: The D&H order number.

<INVOICE>
    Parent: <ORDERSTATUS>
    Type: String
    Contents: The D&H invoice number, if the order has been invoiced. If not, this element will contain "In Process".

<INVTOTAL>
    Parent: <ORDERSTATUS>
    Type: Decimal
    Contents: The sum total for the invoice. Contains attributes:
        Tax
        PST
        HST
        QST
        EHF
        Freight
        Handling
        SubTotal

<MESSAGE>
    Parent: <ORDERSTATUS>
    Type: String
    Contents: The order status message once an order has been invoiced, but has not yet shipped, or if the invoice contains non-stocked items, such as licenses, warranties, or factory-direct.

<SOLDTO>
    Parent; <ORDERSTATUS>
    Type: Complex
    Contents: The Sold-To elements:
        <NAME>
        <ADDRESS>
        <ADDRESS2>
        <CITY>
        <PROVINCE>
        <POSTALCODE>

<NAME>
    Parent: <SOLDTO>
    Type: String
    Contents: The Sold-To Name.

<ADDRESS>
   Parent: <SOLDTO>
   Type: String
   Contents: The Sold-To Address.

<ADDRESS2>
   Parent: <SOLDTO>
   Type: String
   Contents: The Sold-To Address continued.

<CITY>
   Parent: <SOLDTO>
   Type: String
   Contents: The Sold-To City.

<PROVINCE>
   Parent: <SOLDTO>
   Type: String
   Contents: The Sold-To Province

<POSTALCODE>
   Parent: <SOLDTO>
   Type: String
   Contents: The Sold-To Postal Code.

<SHIPTO>
   Parent: <ORDERSTATUS>
   Type: Complex
   Contents: The Ship-To elements:
        <NAME>
        <ADDRESS>
        <ADDRESS2>
        <CITY>
        <PROVINCE>
        <POSTALCODE>

<NAME>
   Parent: <SHIPTO>
   Type: String
   Contents: The Ship-To Name.

<ADDRESS>
   Parent: <SHIPTO>
   Type: String
   Contents: The Ship-To Address.

<ADDRESS2>
   Parent: <SHIPTO>
   Type: String
   Contents: The Ship-To Address continued.

<CITY>
   Parent: <SHIPTO>
   Type: String
   Contents: The Ship-To City.

<PROVINCE>
   Parent: <SHIPTO>
   Type: String
   Contents: The Ship-To Province

<POSTALCODE>
   Parent: <SHIPTO>
   Type: String
   Contents: The Ship-To Postal Code.

<ORDERDDETAIL>
   Parent: <ORDERSTATUS>
   Type: Complex
   Contents: <DETAILITEM> element for each
   item contained on the order.

<DETAILITEM>
   Parent: <ORDERDETAIL>
   Type: Complex
   Contents: Elements:
        <ITEMNO>
        <PRICE>
        <QUANTITY>
        <QTYBO>
        <VENDOR>
        <DESCRIPTION>

<ITEMNO>
   Parent: <DETAILITEM>
   Type: String
   Contents: The D&H Item Number

<PRICE>
   Parent: <DETAILITEM>
   Type: Decimal
   Contents: The item price.

<QUANTITY>
   Parent: <DETAILITEM>
   Type: Integer
   Contents: The quantity to ship

<QTYBO>
   Parent: <DETAILITEM>
   Type: Integer
   Contents: The quantity backordered

<VENDOR>
   Parent: <DETAILITEM>
   Type: String
   Contents: The item vendor's name

<DESCRIPTION>
   Parent: <DETAILITEM>
   Type: String
   Contents: The item description

&lt;PACKAGE&gt;

    Parent: &lt;ORDERSTATUS&gt;

    Type: Complex

    Contents: This element will be absent if the order has not invoiced, or if the invoice contains non-stocked items, such as licenses, warranties, or factory-direct. Elements:

        &lt;DATESHIPPED&gt;

        &lt;CARRIER&gt;

        &lt;SERVICE&gt;

        &lt;SHIPPED&gt;

        &lt;TRACKNUM&gt;

        &lt;SHIPITEM&gt;

&lt;CARRIER&gt;

    Parent: &lt;PACKAGE&gt;

    Type: String

    Contents: The carrier used for this package.

&lt;SERVICE&gt;

    Parent: &lt;PACKAGE&gt;

    Type: String

    Contents: The service level for this package.

&lt;TRACKNUM&gt;

    Parent: &lt;PACKAGE&gt;

    Type: String

    Contents: The tracking number assigned to the package. This number is subject to change if the package has not physically shipped.

&lt;DATESHIPPED&gt;

    Parent: &lt;PACKAGE&gt;

    Type: String

    Contents: The date the package was shipped from the Distribution Center.

&lt;SHIPPED&gt;

    Parent: &lt;PACKAGE&gt;

    Type: String

    Contents: Yes or No if package has physically shipped.

&lt;SHIPITEM&gt;

    Parent: &lt;PACKAGE&gt;

    Type: Complex

    Contents: There will be one &lt;SHIPITEM&gt; element for each item contained in the package. Elements:

        &lt;SHIPITEMNO&gt;

        &lt;SERIALNO&gt;

&lt;SHIPITEMNO&gt;

    Parent: &lt;SHIPITEM&gt;

    Type: String

    Contents: The D&amp;H item number of the item.

&lt;SERIALNO&gt;

    Parent: &lt;SHIPITEM&gt;

    Type: String

    Contents: The serial number of the item if applicable.

&lt;STATUS&gt;

    Parent: &lt;XMLRESPONSE&gt;

    Type: String

    Contents: 'success' or 'failure'

        If 'success', &lt;XMLRESPONSE&gt; will contain &lt; ORDERSTATUS &gt;.

        If 'failure', &lt;XMLRESPONSE&gt; will contain &lt;MESSAGE&gt;.

&lt;MESSAGE&gt;

    Parent: &lt;XMLRESPONSE&gt;

    Type: String

    Contents: Error message or notification regarding request failure.

```
<?xml version='1.0' encoding='UTF-8' ?>
<XMLRESPONSE>
  <ORDERSTATUS>
    <DATE>12/15/16</DATE>
    <BRANCH>Toronto</BRANCH>
    <PONUM>ABC123456789</PONUM>
    <ORDERNUM>1234567</ORDERNUM>
    <INVOICE>7654321</INVOICE>
    <INVTOTAL Tax="0" PST="0" HST="0" QST="0" EHF="0" Freight="0"
            Handling="0" SubTotal="671.60">
      671.60
    </INVTOTAL>
    <SOLDTO>
      <NAME>{Sold-To Name}</NAME>
      <ADDRESS>{Sold-To Street}</ADDRESS>
      <ADDRESS2>{Sold-To Street Line 2}</ADDRESS2>
      <CITY>{Sold-To City}</CITY>
      <PROVINCE>{Sold-To Province Abbreviation}</PROVINCE>
      <POSTALCODE>{Sold-To Postal Code}</POSTALCODE>
    </SOLDTO>
    <SHIPTO>
      <NAME>{Ship-To Name}</NAME>
      <ADDRESS>{Ship-To Street}</ADDRESS>
      <ADDRESS2>{Ship-To Street Line 2}</ADDRESS2>
      <CITY>{Ship-To City}</CITY>
      <PROVINCE>{Ship-To Province Abbreviation}</PROVINCE>
      <POSTALCODE>{Ship-To Postal Code}</POSTALCODE>
    </SHIPTO>
    <ORDERDETAIL>
      <DETAILITEM>
        <ITEMNO>FP781</ITEMNO>
        <PRICE>444.92</PRICE>
        <QUANTITY>1</QUANTITY>
        <QTYBO>0</QTYBO>
        <VENDOR>BenQ</VENDOR>
        <DESCRIPTION>1280 x1024 TFT, LCD;Silver</DESCRIPTION>
      </DETAILITEM>
      <DETAILITEM>
        <ITEMNO>WRT54G</ITEMNO>
        <PRICE>117.86</PRICE>
        <QUANTITY>1</QUANTITY>
        <QTYBO>0</QTYBO>
        <VENDOR>Linksys</VENDOR>
        <DESCRIPTION>CABLE/DSL RTR 802.11G W/SWITCH</DESCRIPTION>
      </DETAILITEM>
      <DETAILITEM>
        <ITEMNO>WUSB11</ITEMNO>
        <PRICE>54.41</PRICE>
        <QUANTITY>2</QUANTITY>
        <QTYBO>0</QTYBO>
        <VENDOR>Linksys</VENDOR>
        <DESCRIPTION>USB 11MBPS Wireless Adapter</DESCRIPTION>
      </DETAILITEM>
```

Figure 12.1 – Canada Order Status Response

```
          <DETAILITEM>
            <ITEMNO>MCX0005KKN00</ITEMNO>
            <PRICE>89.12</PRICE>
            <QUANTITY>0</QUANTITY>
            <QTYBO>2</QTYBO>
            <VENDOR>Coolermaster</VENDOR>
            <DESCRIPTION>MasterCase 5</DESCRIPTION>
          </DETAILITEM>
       </ORDERDETAIL>
       <PACKAGE>
          <CARRIER>Purolator</CARRIER>
          <SERVICE>Ground</SERVICE>
          <TRACKNUM>{Carrier Tracking Number}</TRACKNUM>
          <DATESHIPPED>12/17/16</DATESHIPPED>
          <SHIPPED>yes</SHIPPED>
          <SHIPITEM>
            <SHIPITEMNO>FP781</SHIPITEMNO>
            <SERIALNO>99l267231123300051hs2311</SERIALNO>
          </SHIPITEM>
       </PACKAGE>
       <PACKAGE>
          <CARRIER>Purolator</CARRIER>
          <SERVICE>Ground</SERVICE>
          <TRACKNUM>{Carrier Tracking Number}</TRACKNUM>
          <DATESHIPPED>12/17/16</DATESHIPPED>
          <SHIPPED>yes</SHIPPED>
          <SHIPITEM>
            <SHIPITEMNO>EZXS16W</SHIPITEMNO>
          </SHIPITEM>
          <SHIPITEM>
            <SHIPITEMNO>WRT54G</SHIPITEMNO>
          </SHIPITEM>
       </PACKAGE>
     </ORDERSTATUS>
     <STATUS>success</STATUS>
</XMLRESPONSE>
```

Figure 12.2 – Canada Order Status Response (continued)