

TD Synnex Webservices – PO Submit V02

Contents

TD SYNEX WebServices Features/Benefits	2
Getting Started.....	2
New revisions to V02	2
Production Schemas and Endpoints	3
Testing Schemas and Endpoints	3
Checking Connection via UI	3
Security Envelope.....	4
Easy Validation.....	4
POtype: “submitPO”	4
SUBMIT.....	4
Response	5
Big Deal Reference #	7
Valid Big Deal test scenario.....	7
Invalid Big Deal test scenario	8
POtype: “submitEFPP0”	9
Successful PO Submit.....	9
PO Submit Response	10
Ship Method selection for PO	11
TD SYNEX (USA) Warehouse List	14
TD SYNEX (CANADA) Warehouse List.....	14

TD Synnex Webservices – PO Submit V02

TD SYNTEX WebServices Features/Benefits

1. Security - Authenticate, authorize, confidential, no-repudiation.
2. Monitor/Tracking - Detailed logs/ Transaction replay.
3. Testing - Auto testing for all logic layers (DAO, service, function testing, integration testing).
4. Support continuous integration (CI).
5. Easy maintainability – Mule server/ Spring framework/Easy integration
6. Logging- Continuous business improvement and performance improvement
7. Support to integrate BPM (Business process Management) into the process.
8. New platform, Current framework for today's business integrations

Getting Started

It's recommended you use a SOAPUI to assist getting up to speed.

By using a submitter, you can open visibility immediately to whether your sample code works or not. Your vision is not clouded by whether other service layers within your code are at fault.

When you load up the SoapUI, you can then create a project and add all the WSDL's

TD SYNTEX has two websites for Webservices.

1. Our UAT environment (<https://testec.synnex.com/ece/mockup-china/SNXwebServices/>)
 - a. This site is used for testing.
 - b. It's a closed environment, nothing ships or bills
 - c. Your regular ECX login/pw's work
 - d. Shipping and invoicing must be done manually so you might need assistance getting downstream transactions to work
2. Our Production environment www.synnexcorp.com/esolutions/
 - a. This is the production site
 - b. Use these WSDL's when ready for Production deployment
 - c. Use your regular ECX Login/pw's
 - d. Shipping/Invoicing done per normal Pick/Pack/Ship/invoice

New revisions to V02

Tag	Purpose	Comment
All Comments tags updated	Mapping improvement	Won't stop auto processing
<rsAccountNo>	Specify Account # to use	Bypass Terms enumeration for special terms accounts

TD Synnex Webservices – PO Submit V02

Production Schemas and Endpoints

US Schema: <https://ws.synnex.com/webservice/poserviceV02?wsdl>

US Endpoint: <https://ws.us.tdsynnex.com/webservice/poserviceV02>

CA Schema: <https://ws.synnex.ca/webservice/poserviceV02?wsdl>

CA Endpoint: <https://ws.ca.tdsynnex.com/webservice/poserviceV02>

Testing Schemas and Endpoints

US Schema: <https://testws.synnex.com/webservice/poserviceV02?wsdl>

US Endpoint: <https://testws.us.tdsynnex.com/webservice/poserviceV02>

CA Schema: <https://testws.synnex.ca/webservice/poserviceV02?wsdl>

CA Endpoint: <https://testws.ca.tdsynnex.com/webservice/poserviceV02>

Checking Connection via UI

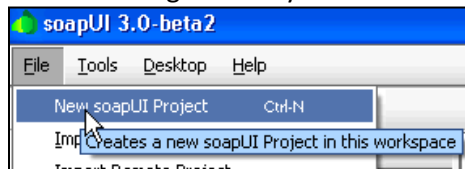
Basic connection testing and transaction familiarization can be performed by using a SOAPUI.

To download a SOAPUI go here: <https://sourceforge.net/projects/soapui/files/> .

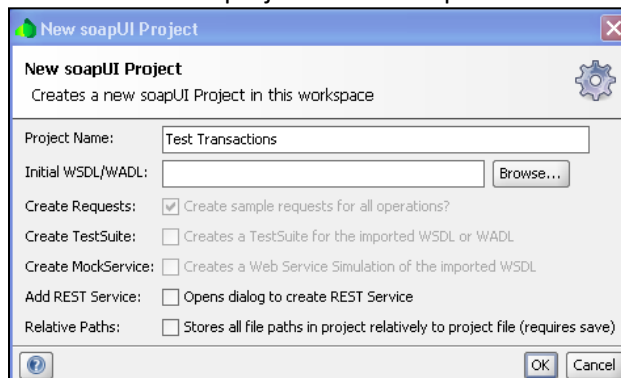
Find SOAPUI v3.0-beta 2 and download file “[soapui-3.0-beta-2-windows-bin.zip](#)”

Once you download and install, you might need to adjust your java settings.

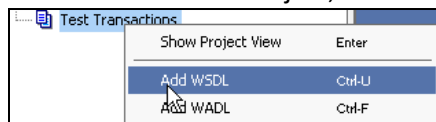
After installing SOAPUI you first must create a new Project (shown below)



Creation of a new project will envelope all individual transaction WSDL's



To add a WSDL to a Project, select “Add WSDL” and copy the WSDL URL from our WebServices Website



TD Synnex Webservices – PO Submit V02

Security Envelope

Each Requires a security TOKEN be added.

The token is located between the Header tags

Looks like this:

```
<soapenv:Header>
  <wsse:Security xmlns:wsse="https://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd" soapenv:mustUnderstand="1">
    <wsse:UsernameToken xmlns:wsu="https://docs.oasis-open.org/wss/2004/01/oasis-200401-
wss-wssecurity-utility-1.0.xsd" wsu:Id="UsernameToken-22676229">
      <wsse:Username>TEST@SYNNEX.COM;123456</wsse:Username>
      <wsse:Password Type="https://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-
token-profile-1.0#PasswordText">PWHERE</wsse:Password>
    </wsse:UsernameToken>
  </wsse:Security>
</soapenv:Header>
```

Note:

- Insert EC Login name and account# in <wsse:Username> tag (**HIGHLIGHTED**)
- Insert EC PW in <wsse:Password> tag (**HIGHLIGHTED**)
- Insert in each WSDL request.

Easy Validation

We try to make it easy to validate the PO's you send through.

To help, we provide visibility into our TEST environment by way of ECExpress.

After submitting your PO via Webservice you can validate your PO in ECExpress

Both Webservices and ECExpress feed into our UAT (test) environment

You can log into our test ecx environment to check whether the addresses, sku's, qties etc all come into our system (Order review/Recent Orders)

It's a real time analysis option – submit, error check and so on.

US UAT version of ecxpress is located testec.us.tdsynnex.com/ecx

CA UAT version of ecxpress is located testec.ca.tdsynnex.com/ecx

Use the same login credentials from the Webservice token to gain access.

POtype: "submitPO"

This PO type is used when submitting PO's billing against a standard reseller account

SUBMIT

```
<soapenv:Envelope xmlns:soapenv="https://schemas.xmlsoap.org/soap/envelope/"
xmlns:po="https://po.model.ws.synnex.com/">
<soapenv:Header>
INSERT SECURITY TOKEN HERE
</soapenv:Header>
```

TD Synnex Webservices – PO Submit V02

```
<soapenv:Body>
  <po:submitPO>
    <arg0>
      <poNo>tester1</poNo>
      <submitDateTime>2010-02-25T15:39:51</submitDateTime>
      <createDateTime>2010-02-25T15:39:51</createDateTime>
      <payment>
        <terms>NET30</terms>
      </payment>
      <shipment>
        <dropShip>true</dropShip>
        <shipToLocation>
          <address>
            <address1>nobile drive</address1>
            <address2></address2>
            <city>fremont</city>
            <state>ca</state>
            <zipCode>94538</zipCode>
          </address>
          <contact>
            <firstName>my first</firstName>
            <lastName>my last</lastName>
            <email>jeffm@synnex.com</email>
            <phone>888-222-2222</phone>
          </contact>
          <locName1>Home</locName1>
        </shipToLocation>
      </shipment>
      <lines>
        <poLineNo>1</poLineNo>
        <synnexSku>2584187</synnexSku>
        <poQty>1</poQty>
      </lines>
      <lines>
        <poLineNo>2</poLineNo>
        <synnexSku>2391799</synnexSku>
        <poQty>2</poQty>
      </lines>
    </arg0>
  </po:submitPO>
</soapenv:Body>
</soapenv:Envelope>
```

Response

```
<soap:Envelope xmlns:soap="https://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:submitPOResponse xmlns:ns2="https://po.model.ws.synnex.com/">
      <return>
        <custPO>
          <pold>20051133</pold>
          <poNo>tester1</poNo>
```

TD Synnex Webservices – PO Submit V02

```
<editFlag>READ</editFlag>
<status>ACCEPTED</status>
<version>34</version>
<submitDateTime>2010-02-25T15:39:51-08:00</submitDateTime>
<specialPriceType>PROMOTION</specialPriceType>
<payment>
  <terms>NET30</terms>
</payment>
<shipment>
  <dropShip>>true</dropShip>
  <freightPayType>PRE_PAY_ON_INVOICE</freightPayType>
  <shipToLocation>
    <locName1>Home</locName1>
    <address>
      <address1>nobile drive</address1>
      <address2/>
      <city>fremont</city>
      <state>CA</state>
      <zipCode>94538</zipCode>
      <country>US</country>
    </address>
    <contact>
      <firstName>my</firstName>
      <lastName>first my last</lastName>
      <email>email@customer.com</email>
      <phone>888-222-2222</phone>
    </contact>
  </shipToLocation>
</shipment>
<lines>
  <editFlag>READ</editFlag>
  <pold>20051133</pold>
  <poLineNo>1</poLineNo>
  <version>33</version>
  <synnexSku>2584187</synnexSku>
  <invType>0</invType>
  <poQty>1</poQty>
  <soQty>0</soQty>
  <boQty>0</boQty>
  <resellerPrice>332.769989013671875</resellerPrice>
  <status>ACCEPTED</status>
  <shipFromWarehouse>ANY</shipFromWarehouse>
  <parentLineNo>0</parentLineNo>
  <bundleID>0</bundleID>
</lines>
<lines>
  <editFlag>READ</editFlag>
  <pold>20051133</pold>
  <poLineNo>2</poLineNo>
  <version>33</version>
  <synnexSku>2391799</synnexSku>
  <invType>0</invType>
```

TD Synnex Webservices – PO Submit V02

```
<poQty>2</poQty>
<soQty>0</soQty>
<boQty>0</boQty>
<resellerPrice>67.05999755859375</resellerPrice>
<status>ACCEPTED</status>
<shipFromWarehouse>ANY</shipFromWarehouse>
<parentLineNo>0</parentLineNo>
<bundleID>0</bundleID>
</lines>
</custPO>
<transStatus>SUCCEED</transStatus>
</return>
</ns2:submitPOResponse>
</soap:Body>
</soap:Envelope>
```

Big Deal Reference

Big Deal reference #'s can be submitted and auto applied during PO submit.

There are safeguards ensuring Big Deal price matches TD SYNEX Calculated and Customer Expected price

If Price combinations do not match, the order stops for TD SYNEX Sales to review and Fix/Reject
Follow these steps:

Valid Big Deal test scenario

- Include <specialPriceReferenceNos> segment and Deal# in request

```
<arg0>
  <poNo>128718-2</poNo>
  <endUserPoNo>EM 01102014-2</endUserPoNo>
  <submitDateTime>2014-01-13T12:00:05</submitDateTime>
  <createDateTime>2014-01-13T12:00:05</createDateTime>
  <specialPriceReferenceNos>89942104</specialPriceReferenceNos>
```

- Sku/Big Deal# combination must be valid
- You have the option of including Target price on the request

```
<lines>
  <poLineNo>1</poLineNo>
  <mfgPartNumber>Q7570AC</mfgPartNumber>
  <resellerPrice>90.87</resellerPrice>
  <poQty>5</poQty>
</lines>
```

Or you may exclude Target price

```
<lines>
  <poLineNo>1</poLineNo>
  <mfgPartNumber>Q7570AC</mfgPartNumber>
  <poQty>5</poQty>
</lines>
```

- If the combination is valid, the PO Response will confirm
 - <resellerPrice> reflects accepted/confirmed Price after discount
 - <Status> ACCEPTED (meaning PO line accepted)
 - <transStatus> SUCCEED meaning successful PO Request

TD Synnex Webservices – PO Submit V02

```
<lines>
  <editFlag>READ</editFlag>
  <poId>12937600</poId>
  <poLineNo>1</poLineNo>
  <version>33</version>
  <synnexSku>4656114</synnexSku>
  <invType>0</invType>
  <poQty>5</poQty>
  <soQty>0</soQty>
  <boQty>0</boQty>
  <resellerPrice>90.87000274658203125</resellerPrice>
  <status>ACCEPTED</status>
  <shipFromWarehouse>ANY</shipFromWarehouse>
  <parentLineNo>0</parentLineNo>
  <bundleID>0</bundleID>
</lines>
</custPO>
<transStatus>SUCCEED</transStatus>
```

- Whether you include Reseller Target price or not on the PO Request, the response will confirm back the Reseller price if the Deal#, Sku, Customer Combinations are valid.
- If the conditions are not valid, Reseller Price will be returned as "0"

Invalid Big Deal test scenario

Periodically you will submit a Big Deal#/SKU/Customer combination that is not valid. In this case, our PO Response will tell provide the information you need.

- Include <specialPriceReferenceNos> segment and Deal# in request

```
<arg0>
  <poNo>128718-2</poNo>
  <endUserPoNo>EM 01102014-2</endUserPoNo>
  <submitDateTime>2014-01-13T12:00:05</submitDateTime>
  <createDateTime>2014-01-13T12:00:05</createDateTime>
  <specialPriceReferenceNos>89942104</specialPriceReferenceNos>
```

- Sku/Big Deal# combination must be valid
- You have the option of including Target price on the request. In this case, <resellerPrice> is wrong, it will not match the TD SYNEX Calculated price

```
<lines>
  <poLineNo>1</poLineNo>
  <mfgPartNumber>Q7570AC</mfgPartNumber>
  <resellerPrice>10.00</resellerPrice>
  <poQty>5</poQty>
</lines>
```

- Or you may leave off the Reseller Target Price

```
<lines>
  <poLineNo>1</poLineNo>
  <mfgPartNumber>Q7570AC</mfgPartNumber>
  <poQty>5</poQty>
</lines>
```

- The PO Response will reply with
 - <resellerPrice> 0 (meaning Price not accepted)

TD Synnex Webservices – PO Submit V02

- <status> ACCEPTED (meaning PO line accepted)
- <transStatus>SUCCEED (meaning transaction success)

```
<lines>
  <editFlag>READ</editFlag>
  <poId>12937602</poId>
  <poLineNo>1</poLineNo>
  <version>33</version>
  <synnexSku>4656114</synnexSku>
  <invType>0</invType>
  <poQty>5</poQty>
  <soQty>0</soQty>
  <boQty>0</boQty>
  <resellerPrice>0</resellerPrice>
  <status>ACCEPTED</status>
  <shipFromWarehouse>ANY</shipFromWarehouse>
  <parentLineNo>0</parentLineNo>
  <bundleID>0</bundleID>
</lines>
</custPO>
<transStatus>SUCCEED</transStatus>
```

POtype: “submitEFPP0”

This PO type is used when submitting PO's for End user billing.

There are special setup requirements for this type of Billing model to be used, please contact your TD SYNEX sales rep for details before using

Successful PO Submit

```
<soapenv:Body>
  <po:submitEFPP0>
    <!--Optional:-->
    <arg0>
      <poNo>test1f</poNo>
      <endUserPoNo>testeu</endUserPoNo>
      <shipment>
        <dropShip>true</dropShip>
        <shipFromLocNo>DOH</shipFromLocNo>
        <shipMethod>FG</shipMethod>
        <!--Optional:-->
        <shipToLocation>
          <address>
            <address1>bbbb</address1>
            <city>fremont</city>
            <state>CA</state>
            <zipCode>94538</zipCode>
          </address>
          <contact>
            <firstName>jeff</firstName>
            <lastName>asdfas</lastName>
            <email>ed@manners.com</email>
          </contact>
        </shipToLocation>
      </shipment>
    </arg0>
  </po:submitEFPP0>
</soapenv:Body>
<phone>541-785-0923</phone>
```

TD Synnex Webservices – PO Submit V02

```
</contact>
  <locName1>jeff loc</locName1>
</shipToLocation>
</shipment>
<!--1 or more repetitions:-->
<lines>
  <poLineNo>1</poLineNo>
  <synnexSku>2402659</synnexSku>
  <poQty>1</poQty>
  <euPrice>118.80</euPrice>
  <shipFromWarehouse>DOH</shipFromWarehouse>
</lines>

<!--Optional:-->
<endUser>
  <euName>jeff eu</euName>
  <location>
    <address>
      <address1>ccc</address1>
      <city>fremont</city>
      <state>CA</state>
      <zipCode>94538</zipCode>

    </address>
  </contact>
  <firstName>jeff</firstName>
  <lastName>mac</lastName>
  <email>jeffm@sss.com</email>
</contact>
  <locName1>jeff</locName1>
</location>
  <extEndUserID>111111</extEndUserID>
</endUser>
  <endUserShipExpense>10.00</endUserShipExpense>
</arg0>
</po:submitEFPPPO>
</soapenv:Body>
</soapenv:Envelope>
```

PO Submit Response

```
<soap:Envelope xmlns:soap="https://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:submitEFPPPOResponse xmlns:ns2="https://po.model.ws.synnex.com/">
      <return>
        <custPO xsi:type="ns2:efpCustPO" xmlns:xsi="https://www.w3.org/2001/XMLSchema-instance">
          <poId>18184401</poId>
          <poNo>TEST1F</poNo>
          <endUserPoNo>testeu</endUserPoNo>
          <editFlag>READ</editFlag>
          <status>ACCEPTED</status>
          <version>33</version>
          <submitDateTime>2009-11-26T09:52:51.641-08:00</submitDateTime>
          <specialPriceType>PROMOTION</specialPriceType>
          <shipment>
            <dropShip>true</dropShip>
            <freightPayType>PRE_PAY_ON_INVOICE</freightPayType>
            <shipMethod>FG</shipMethod>
```

TD Synnex Webservices – PO Submit V02

```
<shipToLocation>
  <locName1>jeff loc</locName1>
  <address>
    <address1>bbbb</address1>
    <city>fremont</city>
    <state>CA</state>
    <zipCode>94538</zipCode>
    <country>US</country>
  </address>
  <contact>
    <firstName>jeff</firstName>
    <lastName>asdfasd</lastName>
    <email>ed@manners.com</email>
    <phone>541-785-0923</phone>
  </contact>
</shipToLocation>
</shipment>
<lines>
  <editFlag>READ</editFlag>
  <pold>18184401</pold>
  <poLineNo>1</poLineNo>
  <version>33</version>
  <synnexSku>2402659</synnexSku>
  <invType>0</invType>
  <poQty>1</poQty>
  <soQty>0</soQty>
  <boQty>0</boQty>
  <resellerPrice>0.00</resellerPrice>
  <euPrice>118.80</euPrice>
  <status>ACCEPTED</status>
  <shipFromWarehouse>DOH</shipFromWarehouse>
  <parentLineNo>0</parentLineNo>
  <bundleID>0</bundleID>
</lines>
<endUserShipExpense>10.00</endUserShipExpense>
</custPO>
<transStatus>SUCCEED</transStatus>
</return>
</ns2:submitEFPPOResponse>
</soap:Body>
</soap:Envelope>
```

We encountered a Vital problem: No such issuer

Ship Method selection for PO

Knowing the proper carrier/Ship Method to use on the PO submit request, isn't always easy.

Carriers change based on ship from and Ship to combinations, as well as the size, weight, dimension of the products being shipped.

For this reason we recommending use another Real time webservice to obtain the proper Ship methods

EndPoint: <https://ws.synnex.com/webservice/eeservice?wsdl>

Sample request as seen in SOAP UI.

There are many combinations of Ship from warehouse, ship method, service level tags you can use on the request, however you can structure a very basic request to get exactly what you need in most cases.

TD Synnex Webservices – PO Submit V02

Empty Schema	Populated Example
<pre data-bbox="105 283 803 966"><code><exp:getAvailableShipMethods> <!--Optional:--> <arg0> <!--Optional:--> <shipFromWarehouse?></shipFromWarehouse> <!--Optional:--> <shipMethod?></shipMethod> <!--Optional:--> <serviceLevel?></serviceLevel> <!--Optional:--> <shipToCity>fremont</shipToCity> <!--Optional:--> <shipToState>CA</shipToState> <!--Optional:--> <shipToCountry>US</shipToCountry> <shipToZipCode>94538</shipToZipCode> <!--1 or more repetitions:--> <items> <synnexSku>111128</synnexSku> <quantity>1</quantity> <euPrice?></euPrice> </items> </arg0> </exp:getAvailableShipMethods></code></pre>	<pre data-bbox="852 283 1534 766"><code><soapenv:Body> <exp:getAvailableShipMethods> <!--Optional:--> <arg0> <shipToCity>fremont</shipToCity> <!--Optional:--> <shipToState>CA</shipToState> <!--Optional:--> <shipToCountry>US</shipToCountry> <shipToZipCode>94538</shipToZipCode> <!--1 or more repetitions:--> <items> <synnexSku>111128</synnexSku> <quantity>1</quantity> </items> </arg0> </exp:getAvailableShipMethods></code></pre>

Sample Response

TD Synnex Webservices – PO Submit V02

```
<return>
  <availableShipMethods>
    <shipMethod>F2</shipMethod>
    <shipMethodDescription>FedEx 2 Day</shipMethodDescription>
    <serviceLevel>2</serviceLevel>
    <freight>9.34</freight>
  </availableShipMethods>
  <availableShipMethods>
    <shipMethod>FG</shipMethod>
    <shipMethodDescription>FedEx Ground</shipMethodDescription>
    <serviceLevel>1</serviceLevel>
    <freight>5.35</freight>
  </availableShipMethods>
  <availableShipMethods>
    <shipMethod>FP</shipMethod>
    <shipMethodDescription>FedEx Priority Overnight</shipMethodDescription>
    <serviceLevel>1</serviceLevel>
    <freight>13.17</freight>
  </availableShipMethods>
  <availableShipMethods>
    <shipMethod>UB</shipMethod>
    <shipMethodDescription>UPS 2 Day Air</shipMethodDescription>
    <serviceLevel>2</serviceLevel>
    <freight>9.34</freight>
  </availableShipMethods>
  <availableShipMethods>
    <shipMethod>UP</shipMethod>
    <shipMethodDescription>UPS Ground</shipMethodDescription>
    <serviceLevel>1</serviceLevel>
    <freight>5.26</freight>
  </availableShipMethods>
</return>
```

On PO submit request, to suggest the preferred carrier, you'd use the <shipMethod> 2 digit code.
Eg (PO submit request)

```
<!--Optional:-->
<freightAccount>12345</freightAccount>
<!--Optional:-->
<freightPayType>COLLECT_BY_RESELLER</freightPayType>
<!--Optional:-->
<shipMethod>UP</shipMethod>
<!--Optional:-->
<shipToLocation>
  <address>
    <address1>1234</address1>
    <city>fremont</city>
    <state>CA</state>
    <zipCode>94538</zipCode>
  </address>
  <contact>
```

TD Synnex Webservices – PO Submit V02

Where <extEndUserID> does not exist, on PO submit setup new End user record, using information found in <endUser> tag

Where <extEndUserID> exists, disregard all information found in <endUser> tag, even if the address info differs from the master eu record

In both of these examples, the order ship to information comes from the “shipment” tag.

TD SYNnex (USA) Warehouse List

LOC#	Location City	State	Zip	Character	Geo Zone	Cutoff time
4	Norcross	GA	30071	DAT	EST	17:30:00
6	Romeoville	IL	60446	DCH	CST	16:30:00
16	Miami	FL	33172	DFL	EST	17:30
3	Fremont	CA	94538	DFR	PST	17:30:00
11	City of Industry	CA	91789	DLA	PST	17:00:00
8	Monroe	NJ	8831	DNJ	EST	17:30:00
6001	Monroe	NJ	8831	DNJ	EST	17:30:00
2	North Las Vegas	NV	89030	DNV	PST	16:30:00
14	Grove City	OH	43123	DOH	EST	
10	Beaverton	OR	97008	DOR	PST	16:30:00
7	Olive Branch	MS	38654	DTN	CST	18:30:00
505	Fort Worth	TX	76177	DFW	CST	17:30:00

TD SYNnex (CANADA) Warehouse List