FeneVision® Best Practice

XML Import/Export (BP0025)

Revision	Date	Description of Change	Revised By
A	20/01/2014	Preliminary issue	MG / SK
B	04/03/2014	Rewriting of the Grids Import section	SK
C	10/03/2018	Fixed formatting and grammar. Added Pickup order type	KED
D	04/29/2020	Formatting and technical terminology.	TRC
E	6/16/2023	Opening Schema Support	RJA
F	9/15/2023	Adding LocationID Tag Support	RJA

Introduction

The system can import and export various types of documents in a default XML format. The default XML file format needs to match the system requirements.

An import XML file's required content will depend on the question and option structure of the user's configuration. It is suggested to work on file formatting once the question and option structure has been finalized and validated.

Sales Orders Import

Features Supported by the XML Import

The XML order import supports all the following features:

- Import of all parts and options that can be selected via the Option Wizard, including size, composition, etc.
- Import of parts via their shortcut names.
- Import of shapes.
- Import of DXF files.
- Automatic recognition of DXF files matching a shape from the catalog (version 10.10 and above).
- Import of colonial grids with symmetric and asymmetric punching points (version 10.11 and above).
- Import of colonial grids with missing segments.
- Import of requests for quotations.
-

ORDER tags

The format is described in the file 'FtOrders.xsd' which can be found in the folder C:\Program Files (x86)\FeneVision\CORE. This file contains all the required information about field length, required or not.

Below are additional explanations about the tags defined at the order level.

Tag	Description
ORDERNO	This tag is not required. If left empty, the system will choose the next available order number.
TYPE	This describes the document type that is imported. The valid values are: 0: Quote 1: Order 2: Credit 3: Invoice Only 4: Manufacturing 5: Forecast 6: Pickup
CUSTOMERID	This must be valid Customer ID (Customer Setup).
SITEID	This must be valid Site ID (Customer Setup).

LOCATIONID	This tag is not required. The tag specifies the Manufacturing Location ID for the order. Available in v18.1+
MEASURMENTTYPE	This field can remain empty if only one measurement type is used. If both system and customer type exist and this field is empty on import, it will use the system measurement type and NOT the customer measurement type. The valid values are: 1: Imperial 2: Metric
CURRENCYID	If the order currency matches customer default currency, this tag is not necessary. Otherwise, it must match to the 'CurrencyID' defined in the system. **This information is different in each configuration.**
REQDATE	Order required date at customer facility.
ORDERCOMMENTS	See the Order Comments section below.
GENERALADDRESS	If customer default general address is used, this field is not necessary. If one tag of GENERALADDRESS is filled, all other tags need to be specified.
INVOICEADDRESS	If customer default financial address is used, this field is not necessary. If one tag of INVOICEADDRESS is filled, all other tags need to be specified.
SHIPADDRESS	If customer default shipping address is used, this field is not necessary. If one tag of SHIPADDRESS is filled, all other tags need to be specified.
PROJECT	It can be used to refer to the project linked with the order. The Project ID must exist. **This information is different in each configuration.**
REJECTCODE	It can be used to import remake orders with a reject code (the code must exist). **This information is different in each configuration.**
UNLOADRULE	Only used if the Opti-Pack module is activated. It contains the name of the unload rule. **This information is different in each configuration.**
USERDEFX	Those tags are used to store additional information about the order. Those fields are not used in the software.
CHILDORDERS	Not used.

Tag <ORDERCOMMENTS>

This section allows the definition of different comment. The possible comments are:

- Global comment (example 1).
- Order and invoice comment (example 2).
- Packing Slip comment (example 3).

Below is an example:

```
<ORDERCOMMENTS>
  <ORDERCOMMENT>
        <COMMENT>Example 1</COMMENT>
  </ORDERCOMMENT>

  <ORDERCOMMENT>
        <COMMENT>Example 2</COMMENT>
        <ACKNOWLEDGEMENT/>
        <INVOICE/>
  </ORDERCOMMENT>

  <ORDERCOMMENT>
        <COMMENT>Example 3</COMMENT>
        <PACKINGSLIP/>
  </ORDERCOMMENT>
</ORDERCOMMENTS>
```

LINE ITEM tags

Below are additional explanations about the tags defined at the line item level.

Tag	Description
SHORTCUTNAME	Shortcut Name **This information is different in each configuration.** Filling this tag makes the other LINE ITEM tags useless as the part, width, height, and options will be the ones defined for this shortcut.

SUBLINEITEM	Used for openings to indicate sequence of the sub line item. 0 = overall opening and should be sent in first. -101, -102, etc. = Continuous frame windows. 1, 2, etc. = Standard windows
PART	Part Number **This information is different in each configuration.**
SUFFIX	Most commonly 0000
THICKNESS	If users do not typically enter the thickness in Order Entry, this tag is not required.
MASTERPART	Not typically used, but can be set to a value of -1 if scheduling issues come up.
USERDEFX	Those tags are used to store additional information about the line item. Those fields are not used in the software.
CUSTOM	See the 'Import of grids' section below.
BINARIES	This tag is not used

OPTIONS tags

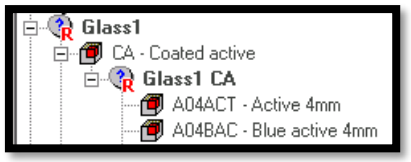
All questions and options that are available in the Option Wizard during Order Entry are also available for order import. This includes the selection of the shape, the glass types, and the processes.

The questions and options structure are specific for each customer and must be provided by the customer as the <GROUP>, <CODE> and <VALUE> tags depend on this structure.

Tag	Description
GROUP	It refers to the "Question" in the Option Wizard.
CODE	It refers to the "Option Code" in the Option Wizard.
NAME	Added to support auto-alignment features within opening part. Must equal 'AUTOALIGN'.
VALUE	It refers to the "Option Value" in the Option Wizard. When using the Name tag, the valid values are: 1: Yes, Auto Align the grids 0: No, custom locations will be defined.

Example 1

The customer question structure to select the first glass of the composition is this one:

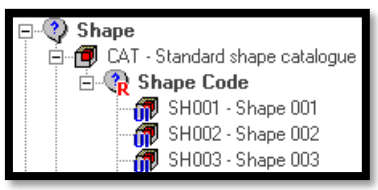


To select the 'Active 4mm' glass, the following is sent:

```
<OPTIONS>
  <OPTION>
    <GROUP>Glass1</GROUP>
    <CODE>CA</CODE>
  </OPTION>
  <OPTION>
    <GROUP>Glass1 CA</GROUP>
    <CODE>A04ACT</CODE>
  </OPTION>
</OPTIONS>
```

Example 2

The customer question structure to select the shape is this one:



To select the shape 3 with H1 and W1 parameters equal to 500mm, the following is sent:

```
<OPTIONS>
  <OPTION>
    <GROUP>Shape</GROUP>
    <CODE>CAT</CODE>
  </OPTION>
  <OPTION>
    <GROUP>Shape Code</GROUP>
    <CODE>SH001</CODE>
    <VALUE>W1=500,H1=500</VALUE>
  </OPTION>
</OPTIONS>
```

Opening Import

Version 17.0 and later support the ability to send opening and Bay/Bow parts through the XML interface. The import supports both continuous frame and Filed/Factory Mull Kit configurations. An example of how all three can be ordered within one opening is shown below.

Example 1

The following example shows how a user can import to a generic opening part in FeneVision the following: opening split horizontally into two sections with a continuous frame double hung in the first section and a casement in the second section.

```
 <ITEM> 'Opening information at the top level.'
  <LINEITEM>1</LINEITEM>
  <SUBLINEITEM>0</SUBLINEITEM>
  <QUANTITY>1</QUANTITY>
  <PART>OPENING</PART>
  <SUFFIX>0000</SUFFIX>
  <WIDTH>90</WIDTH>
  <HEIGHT>68.1875</HEIGHT>
  <THICKNESS>0</THICKNESS>
  <OPTIONS> ....
<ITEM> 'A twin double hung continuous frame window.'
  <LINEITEM>1</LINEITEM>
  <SUBLINEITEM>1</SUBLINEITEM>
  <QUANTITY>1</QUANTITY>
  <PART>TWINDHCF</PART>
  <SUFFIX>0000</SUFFIX>
  <WIDTH>90</WIDTH>
  <HEIGHT>44.8125</HEIGHT>
  <THICKNESS>0</THICKNESS>
  <OPTIONS>
<ITEM> 'The double hung within the continuous frame window.'
  <LINEITEM>1</LINEITEM>
  <SUBLINEITEM>-101</SUBLINEITEM>
  <QUANTITY>1</QUANTITY>
  <PART>8000DH</PART>
  <SUFFIX>0000</SUFFIX>
  <WIDTH>44.8125</WIDTH>
  <HEIGHT>44.8125</HEIGHT>
  <THICKNESS>0</THICKNESS>
  <OPTIONS>
<ITEM> 'The second double hung within the continuous frame window.'
  <LINEITEM>1</LINEITEM>
  <SUBLINEITEM>-102</SUBLINEITEM>
  <QUANTITY>1</QUANTITY>
  <PART>8000DH</PART>
  <SUFFIX>0000</SUFFIX>
  <WIDTH>44.8125</WIDTH>
  <HEIGHT>44.8125</HEIGHT>
  <THICKNESS>0</THICKNESS>
  <OPTIONS> ...
<ITEM> 'T-Mull part within the continuous frame twin double hung.'
  <LINEITEM>1</LINEITEM>
  <SUBLINEITEM>-103</SUBLINEITEM>
  <QUANTITY>1</QUANTITY>
  <PART>MULL</PART>
  <SUFFIX>0000</SUFFIX>
  <WIDTH>0</WIDTH>
  <HEIGHT>44.8125</HEIGHT>
  <THICKNESS>0</THICKNESS>
  <OPTIONS> ...
<ITEM> 'The second window in the opening, next to the twin double hung continuous frame.'
```

```
    <LINEITEM>1</LINEITEM>
    <SUBLINEITEM>2</SUBLINEITEM>
    <QUANTITY>1</QUANTITY>
    <PART>8000CX</PART>
    <SUFFIX>0000</SUFFIX>
    <WIDTH>90</WIDTH>
    <HEIGHT>23</HEIGHT>
    <THICKNESS>0</THICKNESS>
    <OPTIONS> ...
  <ITEM> 'The mull part for the main opening, between the continuous frame double hung and casement.'
    <LINEITEM>1</LINEITEM>
    <SUBLINEITEM>3</SUBLINEITEM>
    <QUANTITY>1</QUANTITY>
    <PART>MULL</PART>
    <SUFFIX>0000</SUFFIX>
    <WIDTH>0</WIDTH>
    <HEIGHT>90</HEIGHT>
    <THICKNESS>0</THICKNESS>
    <OPTIONS> ...
```

Example 2

At the opening level, the user can specify if the grids will be auto aligned or be custom.

```
<ITEM> 'Opening information at the top level.'
    <LINEITEM>1</LINEITEM>
    <SUBLINEITEM>0</SUBLINEITEM>
    <QUANTITY>1</QUANTITY>
    <PART>OPENING</PART>
    <SUFFIX>0000</SUFFIX>
    <WIDTH>90</WIDTH>
    <HEIGHT>68.1875</HEIGHT>
    <THICKNESS>0</THICKNESS>
    <OPTIONS>
     <OPTION> ...
     </OPTION>
    </OPTIONS>
    <CUSTOMS>
     <CUSTOM> 'Indication if grids will be automatically aligned in FeneVision or if locations will be passed through in the import.'
      <GROUP>AUTOALGN</GROUP>
      <CODE></CODE>
      <NAME>AUTOALIGN</NAME>
      <VALUE>1</VALUE>
      <VALUE2></VALUE2>
     </CUSTOM>
```

Grids Import

The system allows the user to send grids through the XML interface, including the information that would result from the use of the grid designer: non-standard punch locations and missing segments. This can be achieved by sending the pattern location as seen in the Option Wizard (see example below and the "OPTIONS tags" section).

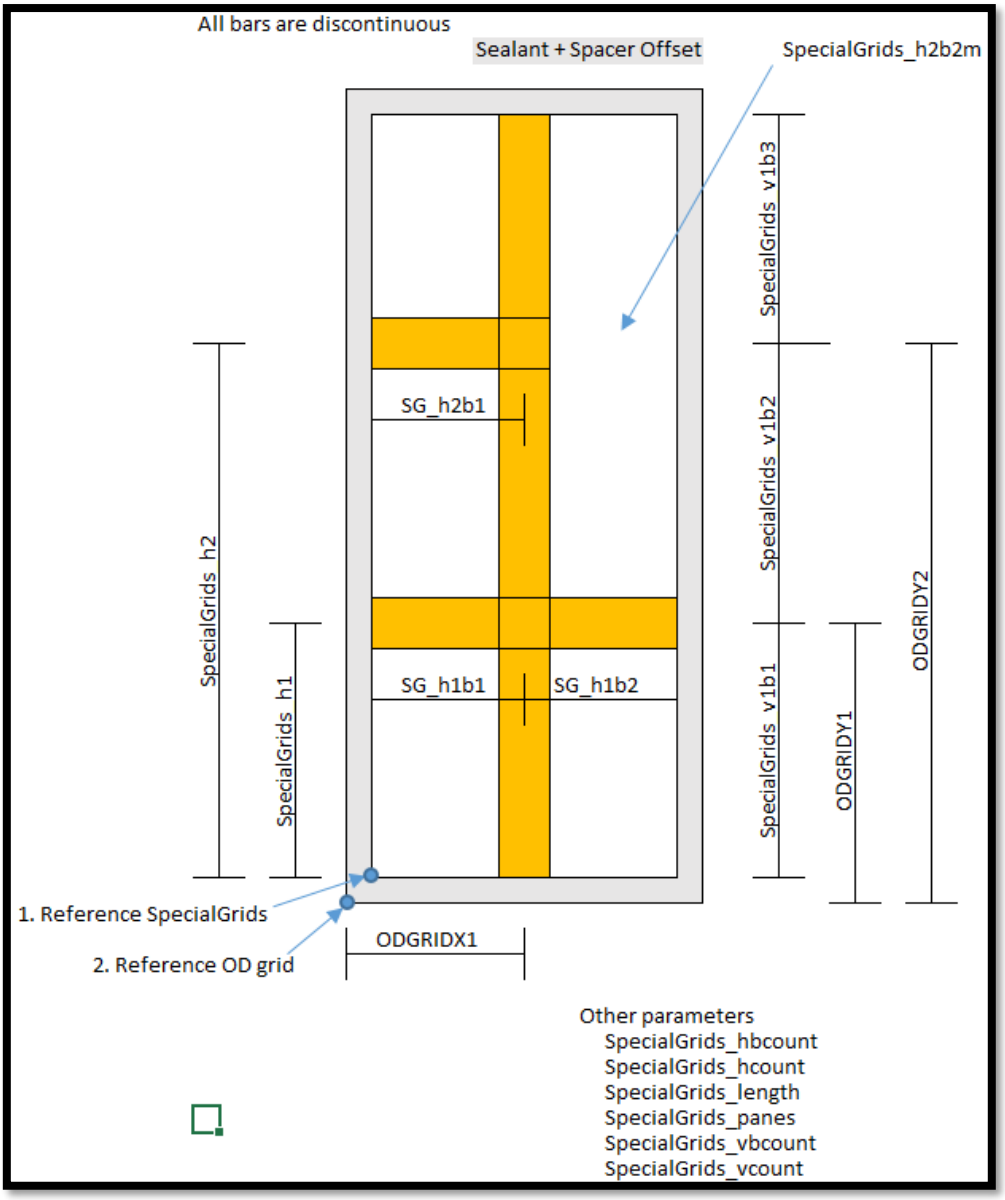
Selection of grid type

The selection of the grid type and grid pattern must be done in the "Options" section. The grid is described based on the questions/options defined by the customer. For example:

```
<OPTION>
  <GROUP>Grid pattern</GROUP>
  <CODE>PANES</CODE>
  <VALUE>H=2,V=1</VALUE>
</OPTION>
```

Asymmetric bars and missing segments

When grid pattern contains asymmetric bars or missing segments, the CUSTOMS tags from the "Options" section can be used. If the grids are symmetric without any missing segments, the custom tags are not required.
The different CUSTOMS tags are:



Parameter (tag NAME)	Reference (see image above)	Description
ODGRID_Xx	1	X coordinate of an intersection between a horizontal and a vertical bar.
ODGRID_Yx	1	Y coordinate of an intersection between a horizontal and a vertical bar.
SpecialGrids_hx	2	Y coordinate of a horizontal bar.
SpecialGrids_hxbx	2	Length of a segment. This parameter is not needed if the horizontal bar is continuous.
SpecialGrids_hxbxm	2	This indicates a missing segment. This parameter is not needed if the horizontal bar is continuous.
SpecialGrids_hxb1a1		Angle of the starting point of the bar (left).
SpecialGrids_hxbna1		Angle of the ending point of the bar (right).

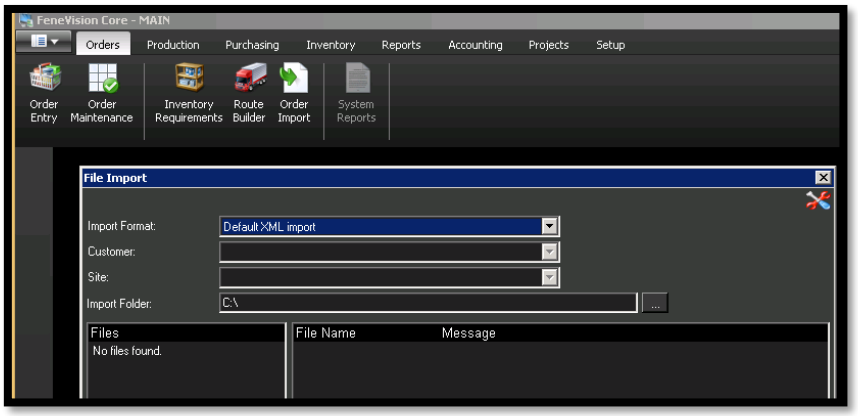
Example

```
<CUSTOMS>
    <CUSTOM><GROUP/><CODE/><NAME>ODGRID_X1</NAME><VALUE>248</VALUE><VALUE2/></CUSTOM>
    <CUSTOM><GROUP/><CODE/><NAME>ODGRID_Y1</NAME><VALUE>311</VALUE><VALUE2/></CUSTOM>
    <CUSTOM><GROUP/><CODE/><NAME>ODGRID_Y2</NAME><VALUE>621</VALUE><VALUE2/></CUSTOM>
```

```
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_v1</NAME><VALUE>238</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_v1b1</NAME><VALUE>301</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_v1b2</NAME><VALUE>310</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_v1b3</NAME><VALUE>302</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_h1</NAME><VALUE>301</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_h1b1</NAME><VALUE>238</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_h1b2</NAME><VALUE>238</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_h2</NAME><VALUE>621</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_h2b1</NAME><VALUE>238</VALUE><VALUE2/></CUSTOM>
<CUSTOM><GROUP/><CODE/><NAME>SpecialGrids_h2b2m</NAME><VALUE>238</VALUE><VALUE2/></CUSTOM>
</CUSTOMS>
```

Import of XML file

Once the file formatting is in place and working, users can generate files and test them. The import of XML files is done in the screen below (Core > Orders >Order Import):



Customer and Site do not need to be selected if already specified in the file itself.

The import folder needs to be selected to show the files in the left section of the window. This import folder will be remembered for the next time.

One or more files can be selected from the left section of the window. On Import, all order entry controls will take place as the files are being imported. The import result will be displayed in the right section of the window.

Once imported, the XML files are moved to a backup subdirectory and disappear from the left section.

Example

Content of the XML file for a simple order with one line item and shape 1:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ORDERS xmlns="http://www.fenetech.com/FtOrders.xsd">
  <ORDER>
    <TYPE>1</TYPE>
    <CUSTOMER>1023</CUSTOMER>
    <REQDATE>2013-10-27</REQDATE>
    <SITE>262</SITE>
    <LOCATIONID>MAIN</LOCATIONID>
    <CUSTOMERREF>This is my order customer reference</CUSTOMERREF>
    <COMMENTS/>
    <ITEMS>
      <ITEM>
        <LINEITEM>1</LINEITEM>
        <QUANTITY>1</QUANTITY>
        <CUSTOMERREF>this is my line item customer reference</CUSTOMERREF>
        <PART>G4</PART>
        <SUFFIX>0000</SUFFIX>
        <WIDTH>496</WIDTH>
        <HEIGHT>933</HEIGHT>
        <THICKNESS>0</THICKNESS>
        <COMMENT/>
        <OPTIONS>
          <OPTION>
            <GROUP>Shape number</GROUP>
            <CODE>SH001</CODE>
            <VALUE>H1=200</VALUE>
```

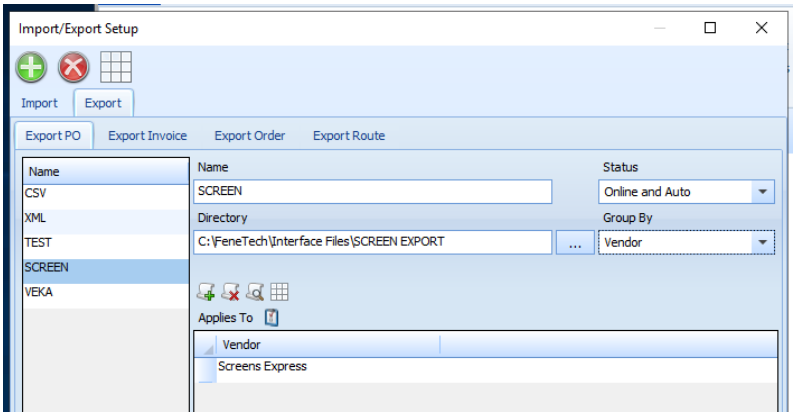
```
                </OPTION>
            </OPTIONS>
        </ITEM>
    </ITEMS>
</ORDER>
</ORDERS>
```

Purchase Orders Export

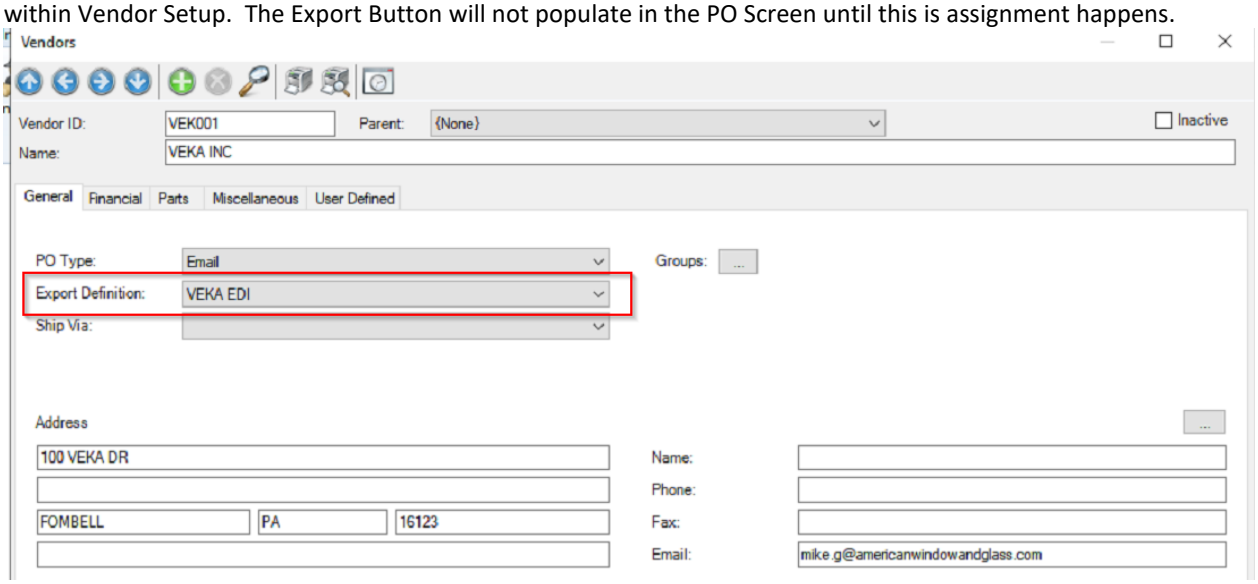
The system can export Purchase Orders in XML format for a vendor. The default format generated by the system for purchase orders matches the one used for sales orders in the previous section but will be generated via the system (eServer module) instead of a manual export. The PO export occurs automatically when the PO is released.

To setup PO export via Core – Setup – Import/Export, Export – Export PO tabs:

- The Status dropdown must be set to 'Online and Auto'. (This generates a task in the eServer queue.)
- Set an output directory path.
- Select a vendor (or vendors) with 'Applies To' icon.
- Select Vendor for Group By.
- A script is not required if the default file format is acceptable.



After assigning the Vendor(s) to your Export, the last step is to physically assign the "Export Definition" to the Vendor within Vendor Setup. The Export Button will not populate in the PO Screen until this is assignment happens.



When releasing a PO, those vendors with an export definition with 'Online and Auto' selected in 'Import / Export Setup' the Export button will immediately be grayed out and say 'Exported' because the PO export automatically when the PO is released.

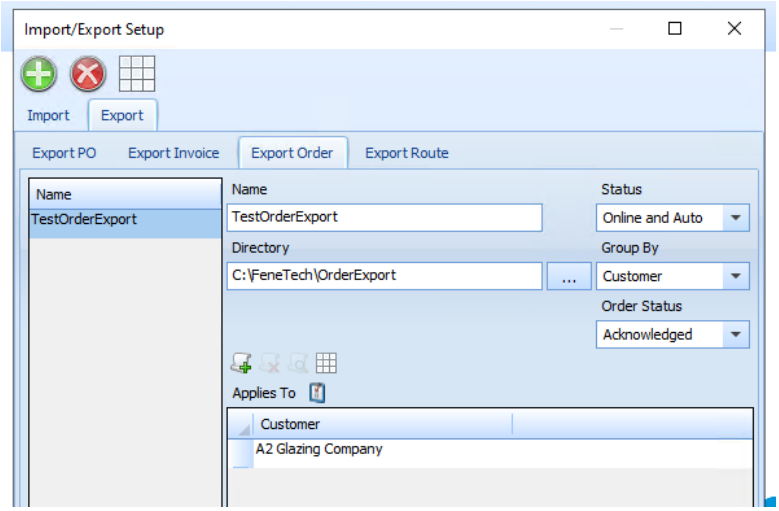
Sales Orders Export

The system can export Sales Orders in XML format for a customer. The default XML format is generated by the eServer module instead of a manual export. The export is triggered based on a change of order status, such as: Acknowledged, Released, Shipped, Closed.

To setup order export via Core – Setup – Import/Export, Export – Export Order tabs:

- The Status dropdown must be set to 'Online and Auto'. (This generates a task in the eServer queue.)
- The Order Status dropdown must be set to {All}, Acknowledged, Released, Shipped, or Closed. For example, setting this to 'Acknowledged' means the task is inserted into the eServer queue when the order is acknowledged.
- Set an output directory path.
- Select a customer (or customers) with 'Applies To' icon.
- A script is not required if the default file format is acceptable.

eServer periodically checks its queue, and will generate a file for the order in the directory specified. These tasks can be viewed in eServer Maintenance.



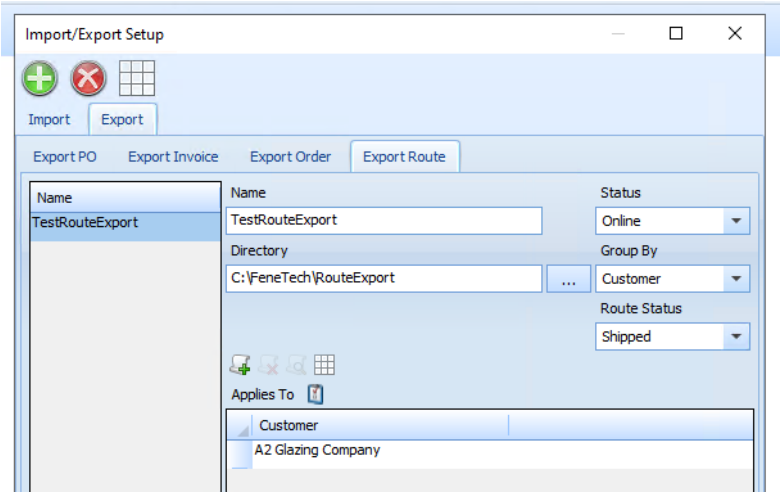
Route Export

The system can export Route data in XML format. It can be grouped by Customer, Customer/Site, or Stop. The default XML format is generated by the eServer module instead of a manual export. The export is triggered when the route is shipped.

To setup route export via Core – Setup – Import/Export, Export – Export Route tabs:

- The Status dropdown must be set to 'Online'. (This generates a task in the eServer queue.)
- The Route Status dropdown must be set to 'Shipped'.
- Set an output directory path.
- Select a customer (or customers) with 'Applies To' icon.
- A script is not required if the default file format is acceptable.

eServer periodically checks its queue, and will generate a file for the route in the directory specified. These tasks can be viewed in eServer Maintenance.



Will the XML format work for me?

Sales Order Import

In an ideal world, all customers are willing to export the default FeneTech XML format and handle things on their side. Otherwise, they might request a custom import to handle their existing EDI file format. FeneTech has plenty of experience writing these custom interface file formats.

Purchase Order Export

In an ideal world, the vendor is willing to import the default FeneTech XML format and handle things on their side. Otherwise, they might request a custom export from the software to match their needs. FeneTech has plenty of experience writing these custom interface file formats.