

# Tax Connectors

SYSPRO 8

Reference Guide

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# Tax Connectors

## Exploring

### Where it fits in?

**SYSPRO 8** caters for connecting to cloud-based tax calculation systems (e.g. **Avalara** and **Vertex**) which allows you to remain compliant when facing complex tax scenarios. Seamless interaction is made possible using a pre-built connection that establishes a direct link between SYSPRO and the relevant platform.

**Tax Connectors** manage the export of data from within SYSPRO that can be used by compatible tax calculation systems in quarterly and annual sales tax returns for state filing purposes.

Without an interactive account to third party tax software such as **Avalara** and **Vertex**, the **Tax Connectors** feature is limited to the manual import of tax rate tables from the third-party tax software to SYSPRO.

### Capabilities

SYSPRO sends transaction data to **Avalara** or **Vertex** and receives the tax total in return, enabling the following capabilities:

- Calculate tax requirements.
- Record tax transactions in **Avalara** and **Vertex**.
- Use the tax transactions recorded in **Avalara** and **Vertex** for reporting purposes.
- Record invoices.
- Create, maintain and store **Avalara** tax exemption certificates (only applicable to **Avalara**).
- Perform other tax-related functions.

### Benefits

- Simplified sales and use tax processes for all US states (from tax determination on transactions to exemption certificate management and tax returns).
- Monthly updates to ensure constant application of current tax rates.
- Analysis capability by state, county and city.
- Enhanced VAT process efficiency (from indirect tax determination to reporting).
- Improved accuracy and reliability of tax calculations at the federal, state, and local levels in the US.

## Navigation

The programs related to this feature are accessed from various locations in SYSPRO:

- *SYSPRO Ribbon bar > Setup*
- *Program List > General Ledger > Tax*

## Terminology

### Avalara

The **Avalara** platform is a powerful and easy-to-use API that helps businesses automate the calculating, storing, auditing and reporting of transactional taxes.

The **CertCapture** component helps you maintain compliance by creating, validating, storing and managing sales tax exemptions and reseller certificates.

### Tax Connectors

**Tax Connectors** provide a connection for establishing a direct link between SYSPRO and compatible cloud-based tax calculation systems (e.g. **Avalara** and **Vertex**).

**Tax Connectors** manage the export of data to these systems so that quarterly and annual sales tax returns can be produced for state filing purposes.

### Vertex

**Vertex** solutions are powered by technology that combines pre-built integrations to leading business applications, a global content database supporting major indirect tax types, and flexible deployment options spanning on-premise, cloud or hybrid.

The **Vertex** platform is desktop software that provides all US and Canadian sales, use and rental tax rates at the component part level, and it also includes a combined rate.

# Starting

## Prerequisites

### Licensing

To use this feature, the following module(s) must be installed according to the terms of your software license agreement:

- e.net System Manager
- Sales Orders
- Tax Connector - Avalara/Tax Connector - Vertex

### Configuring

To use this feature, the following setup option(s) must be configured within the **Setup Options** program:

#### Company General

*Setup Options > Company > General*

- Nationality code  
This must be defined as **USA**.

#### Company Tax Options

*Setup Options > Tax > Company Tax Options*

- Tax system  
This must be defined as **USA tax by advanced geocodes**.

#### Sales and Use Tax

*Setup Options > Tax > Sales and Use Tax*

- Sales and use tax system required  
This option must be enabled.
- Interface type  
This must be defined as **Avalara** or **Vertex**.
- Default ship from information  
The correct shipping address must be defined against these fields.

# Migrating

## Conversion for existing users

During the update process to **SYSPRO 8 2021 R1** or later, if you previously used the legacy **Tax Interface** system integrated with **Avalara** or **Vertex**, the system migrates your information automatically using the **SYSPRO Third Party Tax Files Conversion** program as follows:

1. The system verifies if any entries exist within the [AdmUsaZipCodes](#) table of the system-wide database:

If no entries exist, *and* the legacy ISAM file `SHPFZ5.DAT/IDX` is found within the `\Work` folder, then the entries contained within the `SHPFZ5.DAT/IDX` file are uploaded into the [AdmUsaZipCodes](#) table.



The original `SHPFZ5.DAT/IDX` file is retained in its original location.

2. The [AdmCompanyControl](#) table is checked to see whether the setup options for the legacy third party integration exist. If the prior configuration is found and has not already been converted, then the system converts this as required.

3. The system checks for the existence of the legacy **Avalara** table (`TxrParExemptCert`) to establish any certificate credentials for previous linkage to **Avalara CertCapture**:

If this is found, all entries are moved to the [AdmCompanyControl](#) table within the system-wide database.



The original `TxrParExemptCert` table is deleted.

4. The system verifies if any **Avalara** or **Vertex** passwords exist and converts them as required.
5. The legacy State Filter file (`TXRFFL.DAT` located in the `\Data` folder) is checked to establish if any state filtering was previously configured for integration with **Avalara**:

If the file contains existing entries, these are uploaded to the [AdmTaxFltrUsState](#) table within the company database.



The original `TXRFFL.DAT` file is deleted.

6. The legacy Country Filter file (`TXRFFC.DAT` located in the `\Data` folder) is checked to establish if any country filtering was previously configured for integration with **Avalara**:  
If the file contains existing entries, these are uploaded to the [AdmTaxFltrCountry](#) table within the company database.



The original `TXRFFC.DAT` file is deleted.

7. The legacy Product Class Filter table (`TxrProdClsFltr`) is checked to establish if any product class filtering was previously configured for integration with **Avalara**:

Existing entries within the legacy table are moved to the [AdmTaxFltrPcls](#) table of the company database.



The original `TxrProdClsFltr` table is dropped from the database.

8. The legacy ZIP code range file (`TXRFRZ.DAT/IDX` located in the `\Data` folder) is checked to establish if any ZIP code filtering was previously configured for integration with **Avalara** or **Vertex**:

If the file contains existing entries, these are uploaded to the [AdmTaxZipRange](#) table within the company database.



The original `TXRFRZ.DAT/IDX` file is deleted.

9. The system checks for the existence of the legacy Tax Base table (`TxrTaxNetGross`) in the company database:

If this is found, all entries are moved to the [AdmTaxNetGross](#) table.



The original `TxrTaxNetGross` table is deleted.

10. The system checks for the existence of the legacy Avalara Tax Exemption Certificate cross reference table (`TxrCertInfo`) in the company database:

If this is found, all entries are moved to the [AdmTaxCertXref](#) table.



The original `TxrCertInfo` table is deleted.

11. The [AdmCompanyControl](#) table is updated to indicate that the conversion is complete.

## Existing Customization Affected by the Conversion

As part of the migration process, any existing triggers, events and/or Electronic Signatures that called the various legacy tax programs are updated with the new program codes.

The following cross reference indicates the legacy versus new programs:

Legacy Program	New Program	Program Description
SHPPZP	IMPPZP	ZIP Codes Maintenance
TXRBUS	IMPTAT	Tax Interface
TXRPSP	IMPPSP	Filter by Product Class
TXRPCI	IMPPCI	CertCapture Import
TXRPCS	IMPPCS	Exemption Certificates Setup
TXRPDW	IMPPDW	Update Invoice Reprint Tables
TXRPEC	IMPPEC	Tax Exemption Certificates
TXRPEL	IMPEL	Tax Interface Error Log Print
TXRPID	IMPRID	Tax Rates Import
TXRPNG	IMPPNG	Tax Base Indicator
TXRPRZ	IMPPRZ	Define Filter by ZIP Codes
TXRPSU	IMPPSU	Tax Interface Setup
TXRPSW	IMPPSW	Define Filter by Country



Any additional customization to call programs (such as VBScripts and custom hyperlinks) is not verified or updated. Therefore, any customization you have that is not covered during the migration must be updated manually.



## Security

You can secure this feature by implementing a range of controls against the affected programs. Although not all these controls are applicable to each feature, they include the following:

- You restrict operator access to *activities* within a program using the **Operator Maintenance** program.
- You can restrict operator access to the *fields* within a program (configured using the **Operator Maintenance** program).
- You can restrict operator access to *functions* within a program using passwords (configured using the **Password Definition** program). When defined, the password must be entered before you can access the function.
- You can restrict access to the eSignature *transactions* within a program at operator, group, role or company level (configured using the **eSignature Setup** program). Electronic Signatures provide security access, transaction logging and event triggering that gives you greater control over your system changes.
- You can restrict operator access to *programs* by assigning them to groups and applying access control against the group (configured using the **Operator Groups** program).
- You can restrict operator access to *programs* by assigning them to roles and applying access control against the role (configured using the **Role Management** program).

# Solving

## FAQs

### Availability

#### In which regions is the Tax Connectors feature available?

The **Tax Connectors** feature is limited to the North American markets at present.

### Migration

#### What additional steps are required when migrating from the legacy Tax Interface system?

Any additional customization to call programs (such as VBScripts and custom hyperlinks) is not verified or updated during the migration process.

Therefore, any customization you have that is not covered during the migration must be updated manually.

### Configuration

#### How do I assign tax codes to customers?

To assign customer tax codes, proceed as follows:

1. Open the **Customers** program (*Program List > Contact Management > Setup*).
2. Enter or browse for the relevant customer code within the **Customer** toolbar field.
3. Within the **Contact Details** pane, navigate to the **STATE (EXTENDED TAX CODE)** field of the **Sold to address** section and select the browse function.  
This opens the **Browse on Extended Tax Codes** program.
4. Select the appropriate tax code, followed by the **Select** toolbar function.  
Alternatively, you can create a new tax code using the **Add** function if required.
5. Repeat the above process for the customer's **Ship to address**.
6. Save your changes and exit the program.

## What must I consider when configuring geographic areas?

The following indicates important things to consider when configuring your geographic areas:

### ■ Foreign addresses outside of USA and Canada

The Geographic Area code **4N** is reserved exclusively for use with foreign addresses to indicate any country outside of the USA and Canada.

### ■ Canada addresses

The Geographic Area code **CN** is reserved for use with Canadian addresses.

Canadian postal codes are 6 digits, therefore the system will also verify the postal code attached to the transaction. If a 5 digit postal code is located, then it is assumed that the transaction is for a USA address and will be submitted as a US transaction.

### ■ Canadian Tax

To invoke sales tax for Canada, the following is required:

- The word `Canada` must exist in address line 5 of the **Ship-to address** for the applicable customers.

*Or...*

- The **Geographic Area code** for the customer must be `CN`.

*Or...*

- The customer's **Nationality Code** must be `CAN`.

## How do I add or maintain a single tax code?

Most, if not all, of the tax codes used by your customers will be imported from **Avalara**, either through the manual import (**Tax Rates Import**) or the DLL.



The tax rate import facility is not available for the Tax Connector - Vertex.

However, if you need to add or update a tax code outside of the import, you can use the **Extended Tax Code Maintenance** program.

To add a new tax code, proceed as follows:

1. Open the **Extended Tax Code Maintenance** program (*Program List > General Ledger > Tax > Setup*).
2. Select the **New** function.
3. Enable the **Split code** option to enter the state, county, and city abbreviations separately, or disable the option to enter a single geo code.
4. Depending on your selection of the **Split code** option, enter the **Tax geo code** or abbreviations for the **State, County, and City**.
5. Enter a **Description** of the tax code.
6. Indicate the **Effective date**.
7. If freight is taxable, enable the **Freight taxable** option.
8. Indicate None, Percentage, or Value at the **Tax limits** field.
9. Enter a percentage in the **Tax Rate** column of the **Current Sales Tax Rates** pane.
10. Enter a percentage in the **Tax Rate** column of the **Previous Sales Tax Rates** pane.
11. *Optional...* Select the **Tax Effective Rates** toolbar function to view or maintain the extended tax rate history using the **Browse on Extended Tax Code History** program if required.



An unlimited number of historical rates of tax previously applied to your tax codes can be automatically stored here.

12. Select the **Save** function to save the newly added tax code.



Additions and changes made within the **Extended Tax Code Maintenance** program only come into effect after you exit SYSPRO.

## General

### What are Special tax Calculations?

The **Special calculations** fields within the **Tax Interface Setup** program are used to calculate tax on a different amount from what is actually on a sales order line.

#### FOR EXAMPLE:

In some states a vendor may sell particular items at a discount, but is still required to pay sales tax on the full retail price.

The special calculation will be applied only to invoices for customers who are in the customer class defined in the **Tax Interface Setup** program, and whose ship-to zip code falls within the defined range.

The special price is then calculated by replacing the price paid by the customer with the price code defined in the **Tax Interface Setup** program.

### How can I view transaction errors?

If you don't receive tax rate updates directly from the tax integration software and want to view or print any errors that may have occurred during the posting of transactions, then you can access the error log as follows:

1. Open the **Tax Interface Error Log Print** program (*Program List > General Ledger > Tax > Tax Interface*).
2. Within the **Tax Interface Error Log Print Options** pane, enter the date range that you want to include in the report.
3. *Optional...* Indicate whether you want the report to be sequenced by transaction date or sales order.
4. Select the **Start Processing** function.  
The results are displayed within the **Tax Interface Error Log Print** pane.
5. Indicate if you want the log file to be deleted or not.
6. Exit the program.

## How do I purge audit log entries?

To delete log entries from the [AdmTaxAuditLog](#) table, proceed as follows:

1. Open the **Tax Connectors Audit Log Purge** program (*Program List > General Ledger > Tax > Tax Interface*).
2. Indicate your criteria preferences within the **Information** pane.
3. Select the **Start Processing** function.

A summary of the following information is then displayed within **Tax Connectors Audit Log Purge Report** pane once the purge process completes:

- Start time
- Number of log entries purged
- End time

## How are audit log purges recorded?

The following data is written to the job logging with every purge processed:

- Start time
- End time
- Number of entries deleted

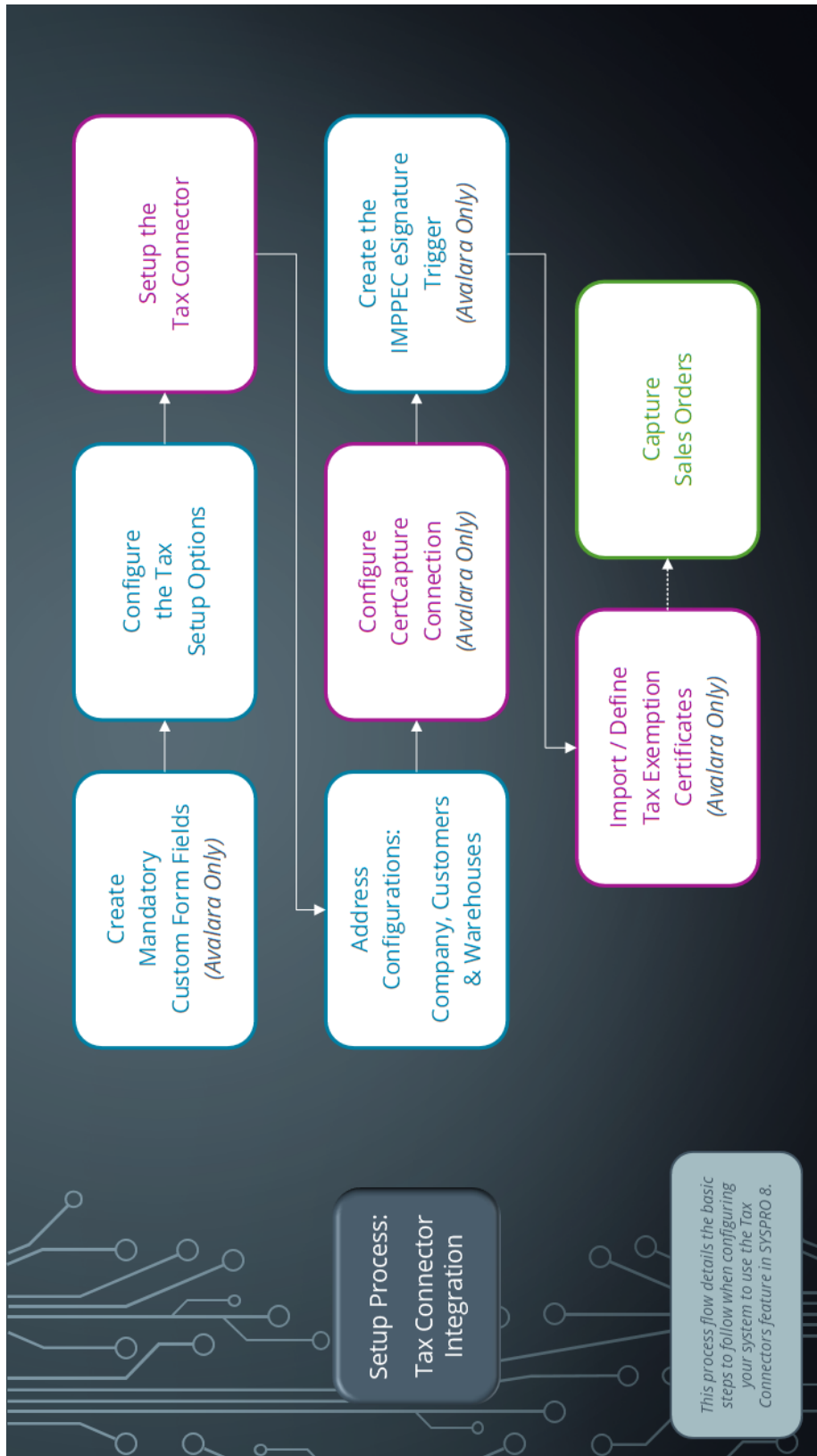
This ensures that you have a complete record of each time the purge is run.



You can view the job logging information via the **Job Logging Report** or **Job Logging Query** program.



# Using



## Process

### Custom Form Field Creation

When using **Tax Connectors**, the system requires certain custom form fields to be defined before configuring the tax connector.

Customer Usage Type (*Mandatory - Avalara*)

A **Customer Usage Type** custom form field (e.g. **CusUsg**) is required against the [ArCustomer](#) table and/or the [ArMultAddress](#) table and must be added within the **Customers** program.



If the **Customer Usage Type** is defined for both the [ArCustomer](#) and [ArMultAddress](#), then the one against the [ArMultAddress](#) takes precedence.

### Why is it required?

The system requires this to identify if any special tax rules must be applied for the customer (e.g. Federal Government, Charitable Organization, Agricultural Production, etc.).

If this applies in your company, then operators also require the ability to select an **Entity/Use Code** type against this field.



Although you don't have to use an **Entity/Use Code**, the set up of this custom form field is still mandatory.

### How are the Entity/Use Codes populated?

SYSPRO supplies the information for the **Entity/Use Codes** in the `IMPPUT.CBL` file, which populates the custom form table during the initial **Avalara** setup.



Any changes to the `IMPPUT.CBL` file only take effect when the service is refreshed.

### What is the process to add the custom form field?

1. Create and add the **Customer Usage Type** field to the [ArCustomer](#) table:
  - a. Open the **Customers** program (*Program List > Contact Management > Setup*) and navigate to the **General Details** pane.
  - b. Right click on the **General Information** header and select the **Field Selector** option.
  - c. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.



- d. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = `Custom Usage Type`  
(or any name meaningful to your company)
- Field Name = `CusUsg`
- Column Name = `CusUsg`
- Field Type = `Alpha`
- Field Length = `25`
- Default = `{Spaces}`
- Validation type = `Lookup` (not mandatory)

- e. Select the **Save Field** function and exit the **Custom Forms Entry** program.
- f. Drag and drop the newly created **CusUsg** field onto the **General Details** pane under the **General information** section and close the Field Selector window.
- g. Exit the **Customers** program.
2. Create and add the **Customer Usage Type** field to the [ArMultAddress](#) table:
- a. Open the **Multiple Ship to Addresses** program (*Program List > Accounts Receivable > Setup*).
  - b. Right click on the **Ship to address information** header and select the **Field Selector** option.
  - c. Repeat the custom form field creation steps above (1.c to 1.e) to create an identical custom form field.
  - d. Drag and drop the newly created **CusUsg** field onto the **Multiple Ship to Address Details** pane under the **Ship to address information** section and close the Field Selector window.
  - e. Exit the **Multiple Ship to Addresses** program.

## AvaTax Code (*Mandatory - Avalara*)

The **AvaTax Code** custom form field (i.e. **AvaTax**) applies to a company's stocked items and is therefore required within the **Stock Code Maintenance** program.

### Why is it required?

In situations where an item being sold requires special taxing rules to be applied, the **AvaTax Code** will identify the type of product on the *stock code level*, so that the proper tax rate can be applied.

#### FOR EXAMPLE:

Digital goods fall into a number of categories that may have different tax rates: digital pictures are considered for taxes separately from streamed music.



The **AvaTax Code** field may be left blank, but if a value is entered, it must be a valid AvaTax Code from **Avalara**.

**Avalara** determines if the item is taxable or not taxable, based on the **AvaTax Code** submitted in the corresponding custom form field. Therefore, the standard **Tax Code** indicator on the sales order detail line doesn't affect tax calculations by **Avalara**.


### What is the process to add the custom form field?

1. Open the **Stock Code Maintenance** program (*Program List > Inventory > Setup*) and navigate to the **Sales Details** pane.
2. Right click on the **Tax Codes** header and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = AvaTax Code  
(*or any name meaningful to your company*)
- Field Name = AvaTax
- Column Name = AvaTax

- 
- Field Type = Alpha
  - Field Length = 15
  - Validation type = None
- b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
  4. Drag and drop the newly created **AvaTax** field onto the **Sales Details** pane under the **Tax Codes** section and close the Field Selector window.
  5. Exit the **Stock Code Maintenance** program.

## AvaTax Code for Merchandise (*Mandatory - Avalara*)

The **AvaTax Code for Merchandise** custom form field (i.e. **NSAvTx**) must be associated with sales order merchandise lines (stocked or non-stocked) and is therefore required within the **Sales Order Entry** program.

### Why is it required?

In situations where an item being sold requires special taxing rules to be applied, the **AvaTax Code for Merchandise** identifies the type of product at the *sales order line level* so that the proper tax rate can be applied.



For stocked items only:

If the **AvaTax Code for Merchandise** field is left blank on the sales order line, then the system will send the value of the **AvaTax Code** field defined against the stock code entered on the line. However, if the **AvaTax Code for Merchandise** field on the sales order line is populated, then it takes precedence over the **AvaTax Code** field.

### What is the process to add the custom form field?

1. Open the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*) and enter a customer in order to access the **Order Line > Stocked** pane.
2. Right click on any caption within the **Order Line > Stocked** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = AvaTax Code for Merchandise  
(*or any name meaningful to your company*)
- Field Name = NSAvTx
- Column Name = NSAvTx
- Field Type = Alpha
- Field Length = 15

- Validation type = None
  - b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
- 4. Drag and drop the newly created **NSAvTx** field onto the **Stocked** pane.
- 5. Navigate to the **Non-stocked Line** pane and right click on any caption to select the **Field Selector** option.
- 6. Drag and drop the newly created **NSAvTx** field onto the **Non-stocked** pane.
- 7. Exit the **Sales Order Entry** program.

Entity use code (*Mandatory - Avalara*)

The **Entity use code** custom form field (i.e. **CusUsL**) must be associated with stocked sales order lines and is therefore required within the **Sales Order Entry** program.

Why is it required?

Defining this field as **TAXABLE** against an order line enables you to indicate that the order line must be treated as taxable, even if the sales order is non-taxable.

What is the process to add the custom form field?

1. Open the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*) and enter a customer in order to access the **Order Line > Stocked** pane.
2. Right click on any caption within the **Order Line > Stocked** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = `Entity Use Code (Line)`  
(*or any name meaningful to your company*)
  - Field Name = `CusUsL`
  - Column Name = `EntUseCodLin`
  - Field Type = `Alpha`
  - Field Length = `25`
  - Validation type = `Lookup` (not mandatory)
- b. Select the **Edit** hyperlink at the **Configure** field.
  - c. From the **Custom Form Lookup** window, select the **New** toolbar function to add a new item:
    - Enter the **Item** as `TAXABLE`.
    - Enter the **Description** as `TAXABLE LINE`.

- Save the entry and close the **Lookup Maintenance** window.
- d. Close the **Custom Form Lookup** window.
  - e. Exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **CusUsL** field onto the **Stocked** pane.
  5. Exit the **Sales Order Entry** program.

## AvaTax code for miscellaneous (*Mandatory - Avalara*)

The **AvaTax code for miscellaneous** custom form field (i.e. **MscAvx**) is required against non-merchandise sales order lines (i.e. freight or miscellaneous) and is therefore required within the **Sales Order Entry** program.

### Why is it required?

In some situations, sales tax must be calculated for freight and other miscellaneous charges. Therefore, the **AvaTax code for miscellaneous** custom form field indicates to **Avalara** which charges are taxable so that tax can be determined properly.

### What is the process to add the custom form field?

1. Open the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*) and enter a customer in order to access the **Order Line > Freight** pane.
2. Right click on any caption within the **Order Line > Freight** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = `AvaTax Code for Miscellaneous`  
(*or any name meaningful to your company*)
  - Field Name = `MscAvx`
  - Column Name = `MscAvx`
  - Field Type = `Alpha`
  - Field Length = `15`
  - Validation type = `None`
- b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **MscAvx** field onto the **Freight** pane.
  5. Navigate to the **Misc Charge** pane and right click on any caption to select the **Field Selector** option.
  6. Drag and drop the newly created **MscAvx** field onto the **Misc Charge** pane.
  7. Exit the **Sales Order Entry** program.



## Warehouse (Mandatory - Avalara)

The **Warehouse** custom form field (i.e. **NStkWh**) is required against non-stocked sales order lines and is therefore required within the **Sales Order Entry** program.

### Why is it required?

Certain taxing authorities require that a shipment's origin address be used to determine the correct taxing method. This can be problematic for companies that ship made-to-order items (i.e. non-stocked) from multiple warehouse locations.

Since standard SYSPRO only allows a single non-stocked warehouse (and therefore a single origination address) the system will check each non-stocked line on a sales order for the **NStkWh** custom form field, where the operator can enter a standard SYSPRO warehouse code for the non-stocked item. The system then sends the address of the indicated warehouse to **Avalara** for the sales order line.



The new field will have a browse button to select any standard SYSPRO warehouse during sales order entry.

### What is the process to add the custom form field?

1. Open the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*) and enter a customer in order to access the **Order Line > Non-stocked** pane.
2. Right click on any caption within the **Order Line > Non-stocked** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Caption**, **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = Warehouse
- Field Name = NStkWh
- Column Name = NStkWh
- Field Type = Alpha
- Field Length = 10
- Validation type = Lookup (Not mandatory)

- b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **NStkWh** field onto the **Non-stocked** pane.
5. Exit the **Sales Order Entry** program.

## Send to Avatax (*Mandatory - Avalara*)

The **Send to Avatax** custom form field (i.e. **Sn2Avx**) is required against sales order headers and is therefore required within the **Sales Order Entry** program.

### Why is it required?

This field is required in order to indicate that system must send the sales order to **Avalara** for tax calculation.

Therefore, if the field is defined as **N** for a sales order, then the order is not sent to **Avalara** and the tax is set to zero. Any other value within this field will result in the system sending the order to **Avalara**.

### What is the process to add the custom form field?

1. Open the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*) and navigate to the **Order Header** pane.
2. Right click on any caption within the **Order Header** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = `Send to AvaTax`  
(*or any name meaningful to your company*)
  - Field Name = `Sn2Avx`
  - Column Name = `Send2AvaTax`
  - Field Type = `Alpha`
  - Field Length = `1`
  - Default = `Y`
  - Validation type = `List`
- b. Select the **Edit** hyperlink at the **Configure** field.
  - c. From the **List of Valid Items** window, enter the following:

- Value 1 = Y
  - Value 2 = N
- d. Select the **Save** function.
  - e. Exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **Sn2Avx** field onto the **Order Header** pane.
  5. Exit the **Sales Order Entry** program.

## Buyer's VAT ID (*Mandatory - Avalara*)

The **Buyer's VAT ID** custom form field (i.e. **ARCTID**) is required within the **Customers** program.

### Why is it required?

When the **ARCTID** custom form field is entered on the customer master record, the system will identify the field as the buyer's VAT ID.

### What is the process to add the custom form field?

1. Open the **Customers** program (*Program List > Contact Management > Setup*) and navigate to the **Customer Details** pane.
2. Right click on the **Customer information** header within the **Customer Details** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = Buyer's VAT ID  
(*or any name meaningful to your company*)
  - Field Name = ARCTID
  - Column Name = CustomerTaxId
  - Field Type = Alpha
  - Field Length = 30
  - Default = {Spaces}
  - Validation type = None
- b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
  4. Drag and drop the newly created **ARCTID** field onto the **Customer Details** pane.
  5. Exit the **Customers** program.

## Country ID (Optional - Avalara and Vertex)

You can apply the **Country ID** custom form field (i.e. **Country**) against customers as an alternative to defining the line number for the **Country** field of the **Tax Interface Setup** program.

What is the process to add the custom form field?

1. Open the **Customers** program (*Program List > Contact Management > Setup*) and navigate to the **Customer Details** pane.
2. Right click on the **Ship to Address** header within the **Contact Details** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = Country ID  
*(or any name meaningful to your company)*
- Field Name = CounID
- Column Name = Country
- Field Type = Alpha
- Field Length = 40
- Default = {Spaces}
- Validation type = None

- b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **Country** field onto the **Contact Details** pane.
5. Exit the **Customers** program.



You can also add the **{Country}** custom form field within the **Order Header** pane of the **Sales Order Entry** program to indicate the same information at sales order level.

## Coupon Apportionment (*Optional - Avalara*)

You can apply the **Coupon Apportionment** custom form field (i.e. **CpnApr**) within the **Sales Order Entry** program to denote a miscellaneous line with a coupon value. This value is then used to proportionally reduce the order line's values.

What is the process to add the custom form field?

1. Open the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*) and enter a customer in order to access the **Order Line > Misc Charge** pane.
2. Right click on any caption within the **Order Line > Misc Charge** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = `Coupon Apportionment`  
(*or any name meaningful to your company*)
  - Field Name = `CpnApr`
  - Column Name = `CouponApportn`
  - Field Type = `Alpha`
  - Field Length = `1`
  - Default = `N`
  - Validation type = `List`
- b. Select the **Edit** hyperlink at the **Configure** field.
  - c. From the **List of Valid Items** window, enter the following:
    - Value 1 = `Y`
    - Value 2 = `N`
  - d. Select the **Save** function.
  - e. Exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **CpnApr** field onto the **Misc Charge** pane.
  5. Exit the **Sales Order Entry** program.

### Company against Branch (*Optional - Avalara and Vertex*)

By default, the system sends the SYSPRO Company code (e.g. EDU1) to the tax integration platform when processing transactions.

Alternatively, you can apply the **Company against Branch** custom form field (i.e. **AvxCo**) against AR branches within the **AR Branch Maintenance** program and enable the **Use company code against branch** option within the **Tax Interface Setup** program.

The system then replaces the SYSPRO Company code with the code entered in the **AvxCo** custom form field against the branch of the sales order header.



This is useful if you have a single company in **Avalara** or **Vertex**, but multiple companies within SYSPRO.

### What is the process to add the custom form field?

1. Open the **AR Branch Maintenance** program (*Program List > Accounts Receivable > Setup*).
2. Right click on any caption within the **Branch Details** pane and select the **Field Selector** option.
3. From the **Field Selector** window, select the **New** function to launch the **Custom Forms Entry** program.
  - a. Select the **New** toolbar function and enter the following information within the **Field Properties** pane:



The text entered in the **Field Name** and **Column Name** fields must be entered exactly as it appears below.

- Caption = `Company against branch`  
(*or any name meaningful to your company*)
- Field Name = `AvxCo`
- Column Name = `AvataxCompanyCode`
- Field Type = `Alpha`
- Field Length = `4`
- Default = `{Spaces}`
- Validation type = `None`

- b. Select the **Save Field** function and exit the **Custom Forms Entry** program.
4. Drag and drop the newly created **AvxCo** field onto the **Branch Details** pane.
5. Exit the **AR Branch Maintenance** program.



## Mandatory Configuration

### Configuring Tax Connectors in SYSPRO

The following process explains the configuration required to use the **Tax Connectors** feature:

1. Open the **Setup Options** program and navigate to the **Company Tax Options** form (*Setup Options > Tax > Company Tax Options*):
  - a. Define the **TAX SYSTEM** option as **USA tax by advanced geocodes**.



SYSPRO requires at least one extended tax code defined against customers within the **Customers** program when the **TAX SYSTEM** option is defined as **USA tax by advanced geocodes**. Therefore, you can configure a generic extended tax code with a zero (0) tax rate within the **Extended Tax Code Maintenance** program.

- b. Within the **COMPANY FOR TAX CODES FILE** field, indicate the company database to be updated when using the Tax Connectors.



Tax rates are up-to-date throughout SYSPRO modules, but only one company's database holds the updates.

- c. Define the **SALES TAX CALCULATION** option as **Invoice level**.
2. Navigate to the **Sales and Use Tax** form (*Setup Options > Tax > Sales and Use Tax*):
  - a. Enable the **SALES AND USE TAX SYSTEM REQUIRED** option.
  - b. *Optional*

Enable the **APPLY USA 3RD PARTY TAX IN SALES ORDERS** if you want the system to call the tax connector platform to immediately calculate the tax and total values displayed for every sales order line added or maintained within the **Sales Order Entry** and **Point of Sale Entry** programs.



This may slow down the sales order process as it adds a performance overhead. In addition, enabling this option can result in higher costs as every query transaction is generally charged for by the tax connector platforms.

Alternatively, leave the option disabled to calculate the tax based on the advanced geocodes (which map to the imported tax rates) when querying the sales order values.

- c. Define the **INTERFACE TYPE** option as **Avalara** or **Vertex** as required.
  - d. Indicate the correct shipping address within the **DEFAULT SHIP FROM INFORMATION** fields.



If this is not defined correctly, the integration to the Tax Connectors platform will fail as the tax on non-stocked items, freight and miscellaneous charges is calculated according to this information.

e. *Vertex users only:*

Optionally indicate the **IDENTIFICATION LEVEL**, **USER COMPANY** and **USER DIVISION** as applicable.

The **USER COMPANY** and **USER DIVISION** fields are free-form and used to accumulate all tax information against the specification.

f. Enable the **UPDATE TAX FOR THIS COMPANY** option.

This ensures that the company's tax database is automatically updated by the Tax Connectors platform.

g. Select the **RUN SETUP** option to continue the configuration using the **Tax Interface Setup** program.

3. Once in the **Tax Interface Setup** program, ensure that the **Integration Software** toolbar field reflects the tax connector you require.

a. When using the Tax Connector - Avalara, the following configuration is required within the **Avalara** pane:

i. Define the following options with your specific details:

- **AvaTax URL**
- **Account number**
- **License key**
- **Timeout**
- **Default tax code for freight**
- **Default tax code for misc charges**

ii. *Optional*

Use the **Filter** options to exclude certain states, countries or product classes from submission to **Avalara** if required (i.e. the invoice is not sent through to **Avalara** when you invoice from a warehouse within an excluded state).

iii. Define the **Location code source** as required to indicate which information must be inserted in the **Avalara** header.

iv. Ensure to define the **Date format for AvaTax** as you require it to be rendered in **Avalara**.



If this is not configured correctly, failures will occur when you submit your taxes.

- v. Select the **Update** hyperlink at the **Update invoice reprint tables** field to launch the **Update Invoice Reprint Tables** program.

This is required to ensure that existing data in the following tables (that was processed before linking to **Avalara**) is updated to allow for the accurate re-print of taxes for SYSPRO AR Invoices:

- Sales Order USA Tax Reprint ([SorUsaTaxRep](#))
- MDN Reprint Dispatch Note Master ([MdnMasterRep](#))
- MDN Reprint Consolidated Dispatch Master ([MdnMasterRepCon](#))



We recommend that you perform a backup of these tables before proceeding.

From the **Update Invoice Reprint Tables** program, proceed as follows:

- i. Indicate the **Invoice date range** required for the system to pull the tax values recorded within the [ArTrnSummary](#) table to update the corresponding re-print tables.

We recommend setting the **From** date as the date when SYSPRO was initially implemented and the **To** date as the date on which you implemented the Tax Connector - Avalara.



Reprint records created after the switch to **Avalara** contain `u` in the [LimitFlag](#) field. Therefore, the program checks this field first and doesn't make any changes to the database for records already defined as `u`. This ensures that data is not negatively impacted if the program is executed more than once.

- ii. Indicate the required **GL code** and **Tax code**.
- iii. Select the **Start Processing** function.

Upon completion, a summary window is displayed with the number of processed records, errors found (if any) and invoices converted successfully.

- vi. *Optional*

The **Archive submitted files** and **Retain audit log** options are enabled by default, as without at least one of these options enabled you have no way of viewing the files that have been submitted to the tax connector.

- Therefore (if you don't disable the **Retain audit log** option) indicate your required retention period at the **Period to retain audit log** field.
- vii. Once you have concluded the above mentioned steps, select the **Test Connection** toolbar function to ensure all entries are correct and that you can connect to **Avalara** successfully.
- b. When using the Tax Connector - Vertex, the following configuration is required within the **Vertex** pane:
- i. Configure the following options with your specific details:
    - **Vertex URL**
    - **Connect to Vertex**
    - **Login and Password** (This applies if you selected **Login/Password** at the **Connect to Vertex** option)
    - **Trusted ID** (This applies if you selected **Trusted ID** at the **Connect to Vertex** option)
    - **Timeout**
    - **Vertex department**
  - ii. *Optional*

The **Archive submitted files** and **Retain audit log** options are enabled by default, as without at least one of these options enabled you have no way of viewing the files that have been submitted to the tax connector.

Therefore (if you don't disable the **Retain audit log** option) indicate your required retention period at the **Period to retain audit log** field.
  - iii. Once you have configured your connection details, select the **Test Connection** toolbar function to ensure all entries are correct and that you can connect to **Vertex** successfully.
- c. Within the **Company Details** pane:
- i. Configure the options as required.
  - ii. *Optional*

Enable the **Use customer/invoice presentation length** option to use the presentation length when passing customer and invoice numbers to the Tax Connectors software. Alternatively, the full 15-character numeric number is used when this option is disabled.

iii. *Optional*

Indicate the customer class, price code and zip code range for any special tax calculations you require.

- d. Within the **Address** pane, configure how addresses are formatted on sales orders (**Ship-to Address (Customer)**) and warehouse records (**Ship-from Address (Warehouse)**), as per your requirements.

This indicates how the integration will pass the address lines through to **Avalara** or **Vertex**, as sales tax is determined by city and state, so the interface must be able to determine where to find this information.



Ensure that the addresses defined against your company, customers and warehouses match this configuration to ensure that the mapping works correctly and no errors occur when integrating with **Avalara** or **Vertex**.

**FOR EXAMPLE:****Ship-to Address (Customer)**

Address line number for street	2
Address line numbers for city and state	City and State in separate lines
Address line for city	3
Address line for state	4
Country	5

**Ship-from Address (Warehouse)**

Address line number for street	2
Address line numbers for city and state	City and State in separate lines
Address line for city	3
Address line for state	4
Country	5
Use the country name as entered	Disabled

Recommendations:

- If you are using the Tax Connector - Vertex, we recommend enabling the **Use the country name as entered** option, as **Vertex** uses the actual country name.
- Enable the **Use ZIP code to determine city and state** option to allow SYSPRO to determine the city and state based on the ZIP code to ensure correct details are passed through to **Avalara** or **Vertex**.

This is useful if sales order headers or warehouse delivery addresses are not always formatted the same way. The system can then cross-reference the customer's or warehouse's zip code with the zip code table to determine the city and state.

- e. Select **Save and Exit**.

## Confirming Valid Addresses For Successful Integration

You must have valid company, warehouse and customer addresses to ensure that invoices are passed through to the Tax Connectors platform correctly. Therefore, ensure that the positioning of your address lines are configured correctly within the following programs:



These addresses must match up with your configuration of the **Address** pane fields within the **Tax Interface Setup** program or errors will occur when posting transactions.

- Your Company address is defined within the **Address** form of the **Setup Options** program (*Setup Options > Company > Address*).
- Customer addresses are defined within the **Contact Details** pane of the **Customers** program (*Program List > Contact Management > Setup*).
- Warehouse addresses are defined within the **Delivery Address** pane of the **Warehouse Maintenance for Stock Code** program (*Program List > Inventory > Setup*).



If the zip code is incomplete or only contains five digits, ensure to include the full nine-digit zip code if required, as some states have multiple tax rates.

## Configuring Valid CertCapture Connection



This process only applies to the Tax Connector - Avalara.

Ensure that you have a valid connection to **CertCapture** to avoid failed transactions when you add, change or delete a customer:

1. Open the **Exemption Certificates Setup** program (*Program List > General Ledger > Tax > Tax Interface*).
2. Capture your connection details.
3. Select the **Test Connection** function to ensure all entries are valid.
4. Save and exit the program.

## Creating Required eSignatures Triggers

**i** This process only applies to the Tax Connector - Avalara.

You must configure an eSignature trigger to ensure that the **Tax Exemption Certificates** program is automatically launched when you add, change or delete a customer within the **Customers** program.

1. Open the **eSignature Setup** program (*Program List > Administration > Electronic Signatures*).
2. Define the **Access control** of the following transactions as **Log Only**:
  - AR Customer added
  - AR Customer changed
  - AR Customer deleted
3. Against each of these transactions, select the **Configure** hyperlink to define the required trigger as follows:
  - a. From the **Logging and Trigger Options** pane, enable the **Transaction successful** option under the **Triggers** section.
  - b. Select the **Setup Trigger** function to launch the **Trigger Setup** program:
    - i. Within the **Maintain Trigger** pane, define the **Type** as `Run any program`.
    - ii. Enter `IMPPEC` within the **Program** field.
    - iii. Select the **Save** function and exit the program.
  - c. Select the **Apply** function to save your trigger against the transaction and close the screen.
4. Exit the **eSignature Setup** program and restart SYSPRO.



## Configuring Tax Exemption Certificates

 This process only applies to the Tax Connector - Avalara.



The eSignature triggers against the **AR Customer added**, **AR Customer changed** and **AR Customer deleted** transactions must be configured within the **eSignature Setup** program prior to this process.

After adding, changing or deleting a customer in the **Customers** program, the **Tax Exemption Certificates** program is launched when you save your changes. Proceed as follows:

1. Confirm the entries within each field and indicate if there are any states which must be exempt from paying tax.
2. Select the **Connect to CertCapture** function to post the exemption certificate to **CertCapture** within the **Avalara** platform.

This writes an entry to the **AdmTaxAuditLog** table within the database and returns the allocated **CertCapture** client ID.

You can then use the fields within the **Customer Information** pane of the **Customer Query** program (*Program List > Accounts Receivable* ) for one of the following:

- View the exemption certificate:  
Select the **Show** hyperlink against the **Avalara > View exemption certificate** field.
- Request the exemption letter to be emailed to the email address defined against your operator code:  
Select the **Show** hyperlink against the **Avalara > Request exemption letter** field.
- View the customer's current status and client ID on **Avalara CertCapture**:  
Select the **Show** hyperlink against the **Avalara > View customer status** field.
- View the current status of the exemption certificate on **Avalara CertCapture**:  
Select the **Show** hyperlink against the **Avalara > View certificate status** field.

You can also view the certificate data within the **Avalara CertCapture** platform.

## Sales Order Process

The following explains the process that occurs when you create sales orders after setting up the Tax Connectors feature:

1. Capture the sales order as required within the **Sales Order Entry** program (*Program List > Sales Orders > Sales Order Processing*).
2. Select the **End Order** function, followed by the **Print** function.
3. Once this completes, the **Reprint Document** screen is displayed advising the document reference (i.e. invoice number). The system then passes the invoice and tax details through to **Avalara** or **Vertex**.

During the upload process, these details are written to the `SorUsaTaxRep` and `AdmTaxAuditLog` tables in the SQL database.

An archive file is also created within the `\Base\AvtxArch` folder which includes the invoice details and tax breakdown. An `AV` prefix indicates an Avalara file and an `VR` prefix indicates a Vertex file. This is followed by the SYSPRO company ID and then the sales order number.

The `LineType` column of the `AdmTaxAuditLog` table (or the last line of the `AvtxArch` archive file) indicates if the upload was successful or if there was a failure:

- "S" indicates that the process was successful.
- "F" indicates that the process has failed and provides a reason for the failure.

### FOR EXAMPLE:

- `F | | An address is incomplete or invalid`

This occurs if your customer or warehouse address is not defined correctly in SYSPRO.

- `F | Expected Saved|Posted|DocStatus is invalid for this operation`

This occurs if the current invoice number already exists within the **Avalara** database.

4. You can then view the invoice within the Tax Connectors platform.

## Optional Configuration

### Importing Tax Exemption Certificates



This process only applies to the Tax Connector - Avalara.

If you have a list of existing tax exemption state certificates and want to import these into SYSPRO, proceed as follows:

1. Open the **CertCapture Import** program (*Program List > General Ledger > Tax > Tax Interface*).
2. Indicate the name and full location path of the import file.
3. Select the **Import** function.
4. Review the **Process completed** fields for summary information about the records imported.

## Maintaining Zip Codes

The two key pieces of information used in calculating sales tax are the customer's city and state. However, sales order headers and warehouse delivery addresses may not always be formatted the same way. Therefore, the system may not be able to determine which address lines contain the city or state, or whether any abbreviations have been used.

To avoid this, you can use the separate, unique field for ZIP codes within the sales order header, customer or warehouse address. SYSPRO can then cross-reference the ZIP code with its respective city and state to pass along the correct information.



In the scenario where sales tax must be calculated for stocked items based on the warehouse ZIP code, ensure that the ZIP codes are configured correctly against your warehouses using the **Warehouse Maintenance** program. If the ZIP code is incomplete or only contains five digits, edit it to include the full nine-digit ZIP code.

To add, maintain or delete Zip codes:

1. Open the **ZIP Codes Maintenance** program (*Program List > General Ledger > Tax > Tax Interface*).
2. *When adding a new Zip Code...*

Enter a new **ZIP code** and the relevant **City, State** and **County** on a new line within the list view.

*When maintaining an existing Zip Code...*

Edit an existing Zip code as required within the list view.

*When deleting an existing Zip Code...*

Delete an existing Zip code by selecting the applicable line within the list view and select the **Delete** function.

3. Select the **Save** function and close the program.

## Importing Sales Tax Rates



This process only applies if you use the Tax Connector - Avalara and want to manually import your *sales* tax rates.

Tax rates can be manually imported into SYSPRO via an ASCII file provided by **Avalara**. Then, once you run the import program, SYSPRO uses the updated data in all tax calculations throughout the system (i.e. invoices, sales orders, purchase orders, etc. will use the updated tax rates).

To manually import the *sales* tax rates, proceed as follows:

1. Open the **Tax Rates Import** program (*Program List > General Ledger > Tax > Tax Interface*).
2. Enter your required import criteria within the **Options** pane.
3. Once you have confirmed that the information within the **Details** pane is valid, select the **Import** function.
4. Upon completion, the **Import Results** pane is populated and summarizes the records imported.
5. Exit the **Tax Rates Import** program.



All your customers must be manually linked to their appropriate tax codes (based on their ship-to addresses) so that sales tax is calculated correctly. However, this is not required if your tax is automatically updated by **Avalara**.

## Importing Use Tax Rates



This process only applies if you use the Tax Connector - Avalara and want to manually import your *use* tax rates.

Tax rates can be manually imported into SYSPRO via an ASCII file provided by **Avalara**. Then, once you run the import program, SYSPRO uses the updated data in all tax calculations throughout the system (i.e. invoices, sales orders, purchase orders, etc. will use the updated tax rates).

To manually import the *use* tax rates, proceed as follows:

1. Open the **Tax Rates Import Direct to ADMTXG** program (*SYSPRO Button > Run a program > IMPPNH*).
2. Enter the location and name of the file you want to import.



Although tax code files can be imported from any folder on the server, we recommend always placing them in the `\Work` folder.

3. Indicate if the tax code description is **City, State** or **City, County**.

Take care when making this selection, as tax codes will be imported according to this setting and certain reports will sort/print information based on this.

4. Select the **Import** function.
5. Upon completion, the **Process completed** section is updated with a summary of the records imported.
6. Exit the **Tax Rates Import Direct to ADMTXG** program.

## Maintaining Tax Base Indicators per State



This step applies if you require tax calculations per state to be based on the Net or Gross amount.

To configure the tax rate calculation basis per state, proceed as follows:

1. Open the **Tax Base Indicator** program (*Program List > General Ledger > Tax > Tax Interface*).
2. Select the **Add** function to open the **Tax Base Indicator Maintenance** window.
3. Enter the applicable **State** and indicate if the tax must be calculated on the **Net amount** or **Gross amount**.
4. Select the **Save** function and close the window.
5. Exit the **Tax Base Indicator** program.



You can also use this program to maintain or delete existing states with tax base indicators.

## Affected programs

The following indicates areas in the product that may be affected by implementing this feature:

### Setup programs

Setup Options

*SYSPRO Ribbon bar > Setup*

The USA 3rd Party Tax form has been renamed to Sales and Use Tax and enables you to define the following configuration related to **Tax Connectors**:

- Sales and use tax system required
- Interface type
- Default ship from information
- Update tax for this company

Once you configure the required options, the **Run Setup** hyperlink under **TAX INTERFACE** launches the **Tax Interface Setup** program from where you can continue the Tax Connectors setup.

### Tax Interface Setup

*Setup Options > Tax > Sales and Use Tax > Tax interface > Run Setup*

This program lets you configure the following information for your selected tax connector:

- Connection details
- Filter requirements (by state, country or product class)
- Location code source (**Avalara** only)
- Date format (**Avalara** only)
- File submission archiving
- Audit log retention
- Company options
- Customer address format (i.e. Ship-to addresses)
- Warehouse address format (i.e. Ship-from addresses)

### Exemption Certificates Setup

*Program List > General Ledger > Tax > Tax Interface*



This program only applies to the Tax Connector - Avalara.

This program lets you configure and test your connection to **CertCapture** for access to tax exemption certificates, to avoid failed transactions when you add, change or delete a customer.



## Update Invoice Reprint Tables

Accessible from the **Update** hyperlink of the **Tax Interface Setup** program

This program lets you indicate a date range of invoices that the system can use to pull the tax values recorded within the [ArTrnSummary](#) table to update the corresponding re-print tables.

This ensures the accurate re-print of taxes for SYSPRO AR invoices that were processed before linking to **Avalara**, by updating existing data in the following tables:

- [SorUsaTaxRep](#) (Sales Order USA Tax Reprint)
- [MdnMasterRep](#) (MDN Reprint Dispatch Note Master)
- [MdnMasterRepCon](#) (MDN Reprint Consolidated Dispatch Master)

## Tax Exemption Certificates

Automatically launched when you add, change or delete a customer within the **Customers** program (Dependent on eSignature setup)

 This program only applies to the Tax Connector - Avalara.

This program lets you add, update or delete customer information and CertCapture ID's by connecting to the **CertCapture** system within **Avalara** whenever you add, maintain or delete a customer.

## CertCapture - Show Exemption Certificate

Accessible from the **Show** hyperlinks within the **Avalara** pane of the **Customer Query** program

 This program only applies to the Tax Connector - Avalara.

This program lets you perform the following actions with regards to the exemption certificate saved against a customer:

- View the customer's current exemption certificate recorded in **CertCapture**.
- Email the customer to request their exemption letter.
- View the customer's current status and client ID within **CertCapture**.
- Establish the current status of a customer's exemption certificate within **CertCapture**.

## ZIP Codes Maintenance

Program List > General Ledger > Tax > Tax Interface

This program lets you add, change or delete the ZIP codes used for tax calculations.

## Define Filter by State

*Program List > General Ledger > Tax > Tax Interface*

This program lets you exclude states from the company's tax integration calculations and subsequent submission to **Avalara**.

When any state is defined as excluded, sales order transactions for ship-to locations in those states are then excluded from the transaction files sent to **Avalara** (i.e. no sales tax will be calculated for or added to any sales order shipped to an excluded state).

## Define Filter by Country

*Program List > General Ledger > Tax > Tax Interface*

This program lets you exclude countries from the company's tax integration calculations and subsequent submission to **Avalara**.

When any country is defined as excluded, sales order transactions for ship-to locations in those countries are then excluded from the transaction files sent to **Avalara** (i.e. no sales tax will be calculated for or added to any sales order shipped to an excluded country).

## Define Filter by ZIP Codes

*Program List > General Ledger > Tax > Tax Interface*

This program lets you define a range of ZIP codes to be included in the special tax calculations for tax integration with **Avalara** or **Vertex**.

## Filter by Product Class

*Program List > General Ledger > Tax > Tax Interface*



This program only applies to the Tax Connector - Avalara.

This program lets you exclude a range of product classes from the company's tax integration calculations and subsequent submission to **Avalara**.

When a product class is defined as excluded, sales order transactions that contain stock codes within that product class are then excluded from the transaction files sent to **Avalara**.

## Tax Base Indicator

*Program List > General Ledger > Tax > Tax Interface*

This program lets you add, change or delete tax base indicators (i.e. the tax rate calculation basis per state).



This is useful if you require tax calculations per state to be based on the net or gross amount.

## Import programs

### CertCapture Import

*Program List > General Ledger > Tax > Tax Interface*

 This program only applies to the Tax Connector - Avalara.

This program lets you update the list of states for your customers in **CertCapture** by importing data from an Excel CSV file directly into **Avalara**.

Each line of the import file is sent to **CertCapture** separately to add the customer details and update the list of exemption states for each customer.

The client ID (retrieved during the import process) and exemption states are then added to the [Certcapture Cross Reference](#) table ([AdmTaxCertXref](#)).

### Tax Rates Import

*Program List > General Ledger > Tax > Tax Interface*

 This program only applies to the Tax Connector - Avalara.

This program lets you import *sales* tax rates manually using an ASCII file provided by **Avalara**.

SYSPRO then uses the updated sales tax rates for all applicable tax calculations throughout the system (i.e. invoices, sales orders, purchase orders, etc. will use the updated tax rates when calculating tax requirements).

### Tax Rates Import Direct to ADMTXG

*SYSPRO Button > Run a program > IMPPNH*

 This program only applies to the Tax Connector - Avalara.

This program lets you manually import *use* tax rates for all states (except Colorado) using an ASCII file provided by **Avalara**.

SYSPRO then uses the updated use tax rates for all applicable tax calculations throughout the system (i.e. invoices, sales orders, purchase orders, etc. will use the updated tax rates when calculating tax requirements).

## Period End programs

### Tax Connectors Audit Log Purge

*Program List > General Ledger > Tax > Tax Interface*

This program lets you delete entries from the [AdmTaxAuditLog](#) table, according to the purge options defined within the **Tax Interface Setup** for **Avalara** and/or **Vertex**.

## Report programs

### Tax Interface Error Log Print

*Program List > General Ledger > Tax > Tax Interface*

This program lets you view and print any errors that may have occurred during the posting of transactions to **Avalara** or **Vertex**.

## Query programs

### Master Sub-accounts

*Program List > Accounts Receivable > Setup*

This program indicates to which account the third-party tax is integrated (i.e. Master or Sub-account).

### Customer Query

*Program List > Accounts Receivable*

This program contains the following fields within the **Avalara** pane which launch the **CertCapture - Show Exemption Certificate** program to query information regarding the exemption certificate saved against the customer:

- View exemption certificate
- Request exemption letter
- View customer status
- View certificate status

## Affected business objects

The following indicates the business objects that are affected by this feature:

### Setup objects

AR Master/Sub Account Maintenance

The **AR MASTER/SUB ACCOUNT MAINTENANCE**<sup>1</sup> business object includes a `ThirdPartyTaxInteg` element that indicates to which account the third-party tax is integrated (i.e. `m` indicates a Master account and `s` indicates Sub-account).

This is only accessible if the **APPLY USA 3RD PARTY TAX IN SALES ORDERS** setup option is enabled.



All changes made to this column are written to the amendment journal if the **AMENDMENT JOURNALS REQUIRED** setup option is defined as **Yes** or **Yes, including additions**.

### Transaction objects

Tax Interface

The **TAX INTERFACE**<sup>2</sup> business object interfaces with the Avalara and Vertex tax systems.

Tax Connectors Audit Log Purge

The **TAX CONNECTORS AUDIT LOG PURGE**<sup>3</sup> business object lets you delete entries from the `AdmTaxAuditLog` table, according to the purge options defined within the **Tax Interface Setup** program for **Avalara** and/or **Vertex**.

To ensure that you have a complete record of purge actions, the following data is written to the job logging with each purge processed:

- Start time
- End time
- Number of entries deleted



This business object can't be run standalone in the **e.net Solutions** harness - it must be run through the front-end **Tax Connectors Audit Log Purge** program.

<sup>1</sup>Business object: ARSSMS

<sup>2</sup>Business object: IMPTAT

<sup>3</sup>Business object: IMPPTP

## Query objects

### Customer Amendment Journal Report

The **CUSTOMER AMENDMENT JOURNAL REPORT**<sup>1</sup> business object outputs a `ThirdPartyTaxInteg` field in the `ColumnName` element that indicates if the third-party tax is integrated to the Master or Sub-account (as recorded within the `ArCustomer` table).

This lets you view how tax integration is linked when querying the amendment journal.

### List of Master/Sub-Accounts

The **LIST OF MASTER/SUB-ACCOUNTS**<sup>2</sup> business object includes a `ThirdPartyTaxInteg` element that indicates if the third-party tax is integrated to the Master or Sub-account (as recorded within the `ArCustomer` table).

This lets you view how tax integration is linked when viewing the details of each customer.

<sup>1</sup>Business object: ARSQAJ

<sup>2</sup>Business object: IMPQ31



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