



Data Exchange Module

Purchase Order Receiving Import

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INTRODUCTION

Viewpoint® has created a custom Purchase Order (PO) Receiving Import program which automates the process of receiving the PO line items and creating the necessary Accounts Payable (AP) Invoice associated with each Purchase Order using Spectrum one-step PO receiving. The Purchase Order Receiving Import is a batch file upload which is part of the Data Exchange module, which must be owned to access this menu option. PO Receiving Import will take into account the multi-currency module (if owned and set-up) when creating a AP Invoice.

The automation comes in the form of importing a text file that contains the PO receipt information and the corresponding AP Invoice amount and date. The import routine would need to pass the validation criteria before the PO's are received and the AP invoices are created.

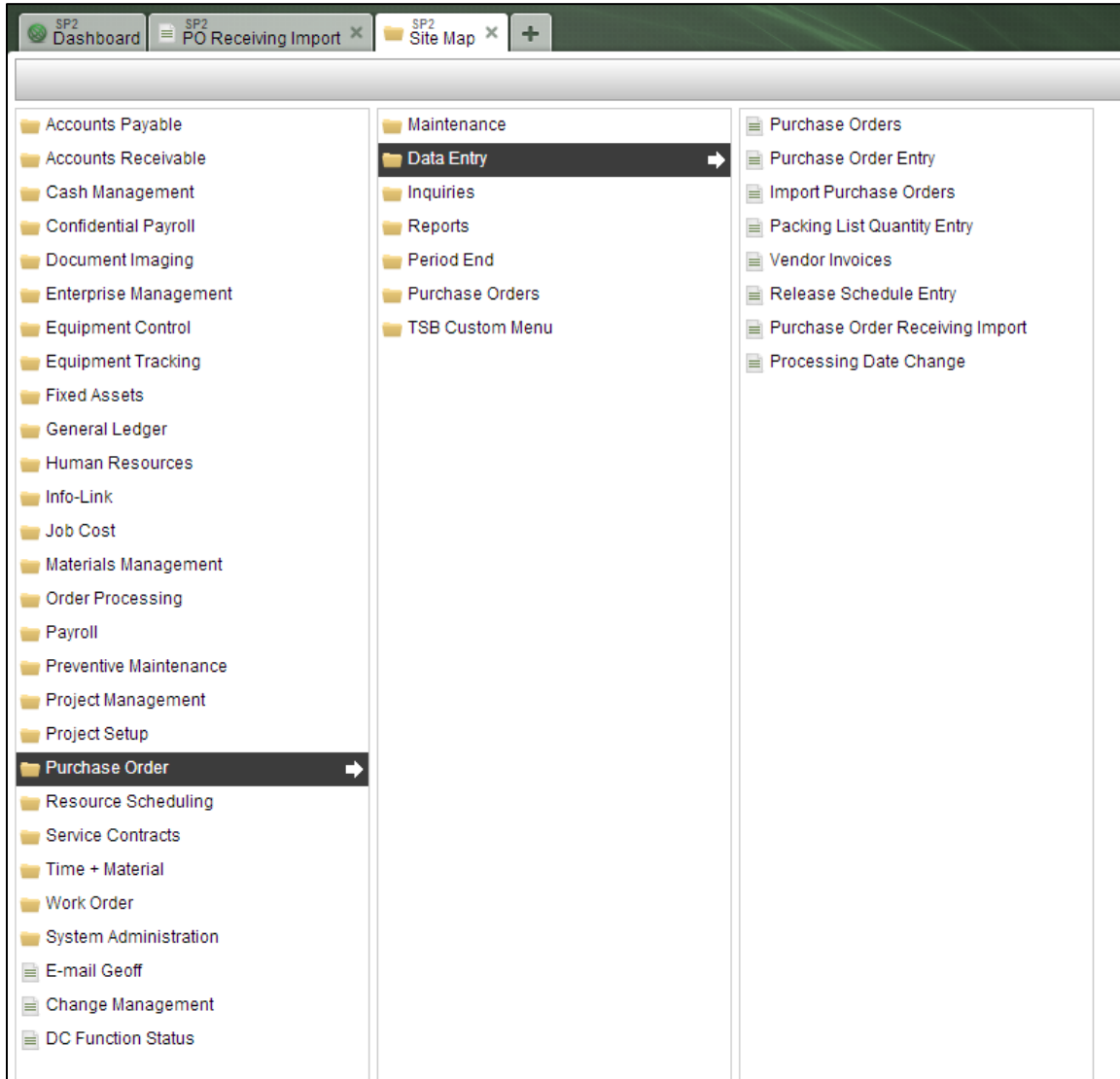
If the imported records do not pass the defined validation, the records appear in an Error Correction screen where the user can decide to fix each error condition or delete the invoice record. Records that are "error free" will simulate the standard one-step PO receiving routine and create the AP unapproved Invoices (if routing code exists) or unposted AP Invoices.

IMPORTANT: This custom import does NOT support PO revisions at this time.

GETTING STARTED

Purchase Order Receiving Import screen

The Purchase Order Receiving Import screen is located in the Purchase Order > Data Entry site map as shown below:



Once the “Purchase Order Receiving Import” option is selected, the following screen displays:

The screenshot shows a software interface for 'PO Receiving Import'. At the top, there are window tabs for 'ABC Dashboard' and 'ABC PO Receiving Import'. Below the tabs is a command bar with buttons: 'Continue', 'Cancel', 'File Layout', 'Errors', 'Tolerance Maint.', 'Tolerance Listing', and 'Item Maintenance'. The main area is titled 'PO Receiving Import' and contains a 'Selections' section with the following fields:

Batch code	AFM	Year	2015	Period	02
G/L date	12/29/15				
Invoice date	12/29/15				
Remarks	default remarks - start screen				
Server image path	\\DCIDEV14ID_drive\templimages\				

The following buttons are available on the Command Bar:

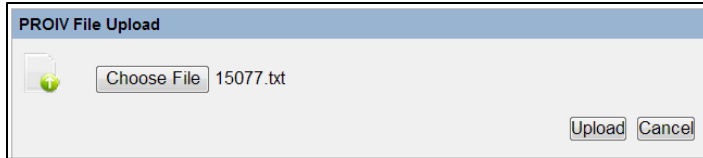
- Continue – used to select and import the required file.
- Cancel – close the screen and return to the site map.
- File Layout – opens a new window and displays the record layout for the header and detail.
- Errors – opens the error correction screens.
- Tolerance Maint. – used to define the Tolerance settings for the unit costs values during the import.
- Tolerance Listing – used to get a report.
- Item Maintenance – used to add items directly to the purchase order detail.

Selections:

- Batch Code – Define the code to be assigned to the imported Accounts Payable transactions if the import file does not include the batch code on the header record.
- G/L Date – Defaults to current processing date and validation to A/P min/max dates on the installation screen. If the import file does not include the G/L date on the header, then this date will be used in the import file.
- Invoice Date – Defaults to current processing date. If the import file does not include the Invoice date on the header, then this date will be used in the import file.
- Remarks – Define any remarks that should appear on all transactions in the file if import file header remarks are blank.
- Server Image Path – Define the server location for attachment file names. If header or detail records have a file name defined on the import, this file name would need to reside within this directory path for the programming to create the document imaging record for the AP transaction.

Once the above start screen values are entered, they default in each time the screen is opened. So if the date fields are used on the start screen to assign invoice and transaction dates, make sure that the correct date is entered prior to importing the file.

Select **Continue** to import the file. The standard PROIV file upload screen prompts the user to select the file to be uploaded into Spectrum.



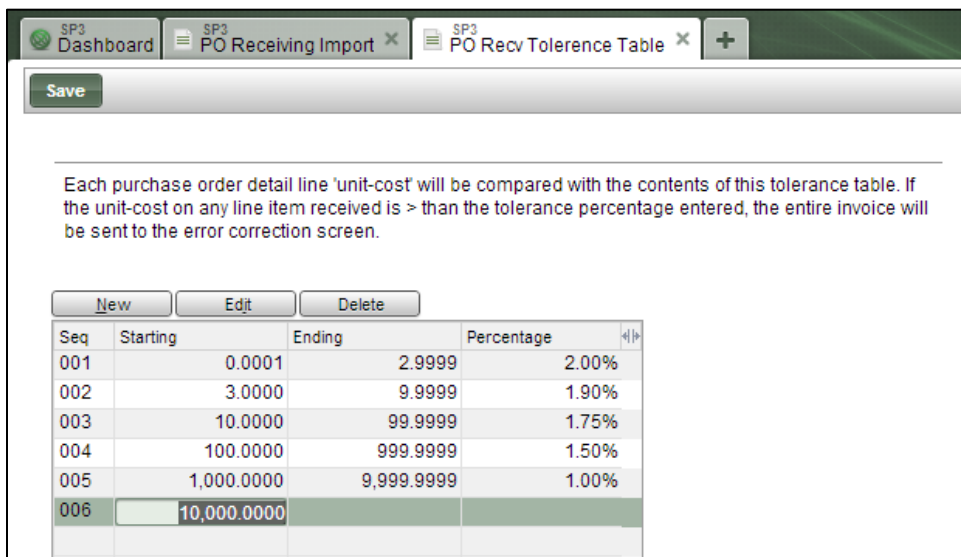
Once the file is attached on the screen click **Upload** to import the data, or click **Cancel** to stop the import routine and return to the start screen.

Tolerance checking on unit price

Prior to importing transactions into Spectrum, the user needs to populate a custom tolerance table which is used by the custom import to validate the received unit cost against the ordered unit cost. This table can be found once the Purchase Order Receiving import option is selected.

Select **Tolerance Maint.** and a new window will appear allowing the user to define the various costs and associated percentage.

IMPORTANT: There needs to be at least one tolerance line entered for the import program to work properly.



The starting and ending values are unit-price amounts. The program determines which range to use in this table based on the unit-price of each purchase order detail line. The percentage column is what the additional markup would be to the unit-price on the purchase order detail record.

The program compares the original PO detail line unit cost with the “imported” unit cost for the transaction. If there is a difference between the amounts, then the program looks to the tolerance table to determine what percentage factor to use.

For example, a Purchase Order has one detail line with a unit cost of \$5.57. This item is received through the custom program and the unit cost of this line is \$5.65. Even though the unit cost is different, this transaction detail would pass the tolerance test because $\$5.57$ (original cost) \times 1.90% (% for the unit cost range) = $\$5.6758$. The received unit cost $\$5.65$ is less than the calculated tolerance.

The custom import program calculates the unit cost for each detail receipt transaction by using values from the imported record (Amount / QTY received). Once the unit cost is calculated, it compares the received vs. the original PO detail line unit cost. If the difference is greater than the calculated tolerance percentage value defined in the tolerance table, this is considered an error situation and the record is sent to Error Correction (The Error Correction logic will be discussed later in this document). If the unit cost is within tolerance and passes validation, the transaction creates an outstanding payable record.

Select **Tolerance Listing** to print the contents of the tolerance table.

FILE LAYOUT

Select **File Layout** on the main PO Receiving Import screen to see a legend of the layout needed for both the header and detail records.

The programming reads a comma separated text file and validates the components prior to updating/creating records within Spectrum. Each imported transaction in the file has a header record and at least one detail record. For each transaction the first line represents the header record and is labeled with an identifier "H". This header record contains general information on the purchase order.

All subsequent lines with the same purchase order and invoice number are interpreted as Detail Records and will have the identifier "D". The file must have at least one header and detail record per purchase order and invoice.

There must be at least one PO detail record for each header record. It is not required that the PO header and detail records be sorted together in the file. The import programming will search through the import file and group the records by PO number prior to importing.

The total amount of the PO detail records must equal the total amount entered within the Header record. Any non-stock items in the import file should be prefixed with an "!" so that the program can validate them to the original Purchase Order.

Header Record

The Header (“H”) lines contain the following fields:

	Name	Req	Max	Type	Field Information
1	Record ID	Yes	1	Text	“H” for Header Record
2	PO Number	Yes	10	Text	Validate to PO Header (must have open status)
3	Batch Code	Yes *	10	Text	*If left blank, default from start screen
4	Invoice #	Yes	20	Text	Validated for duplicates (unapproved, unposted, and history)
5	Invoice Date	Yes *	8	Date	MM/DD/YY - validated against A/P min/max dates. *If left blank, default from start screen
6	GL Date	Yes *	8	Date	MM/DD/YY – validated against A/P min/max dates. *If left blank, default from start screen
7	Total Amount	Yes	12	Numeric	Format (12.2-), includes sales tax (if applicable)
8	Remarks	*	30	Text	Invoice Header Remarks *If left blank, default from start screen
9	Cash Discount**		12	Numeric	Format (12.2-)
10	Credit Card Account		15	Text	Validate to Cash Management – check “account type” = Credit Card
11	Card Number		10	Text	Validate to Sub Account Detail if check box is populated within Bank Account Maintenance
12	Close on Receipt		1	Text	“Y” = close; blank or “N” assumes the Purchase Order should remain open (unless fully received).
13	Error correction		1	Text	“Y” will force it to error correction
14	Routing code		10	Text	Validate to Invoice Approval Routing Master
15	Image path		20	Text	Image or attachment for Invoice
16	Sales Tax		12	Numeric	Sales Tax amount for Invoice

**The following programming logic applies to the Cash Discount (Field 9):

1. If the ‘header’ record contains a non-zero amount in the cash discount field, this value is assigned to the AP Invoice header (discount amount field). The total amount of the Invoice is NOT adjusted by this discount amount. The payment can be adjusted (if taken) during the payment processing cycle.
2. The cash discount amount must be greater than zero and less than the Invoice amount.
3. If the ‘header’ record in the import file does not contain an amount in the cash discount field, then the programming will follow standard Spectrum logic and will assign the discount based on the Purchase Order header Vendor information.

Detail Record

The Detail (“D”) lines contain the following fields:

	Description	Req.	Max.	Type	Notes
1	Record ID	Yes	1	Text	“D” for Detail Record
2	PO Number	Yes	10	Text	Validate to PO Header (must have open status)
3	Invoice Number	Yes	20	Text	Validated for duplicates within the unapproved, unposted, and historical Invoices
4	PO Line Number	Yes	3	Numeric	Validate to PO Detail The line number must be the full three-digit number from the PO (001, 002, etc.)
5	PO Item Code**	Yes	15	Text	Validate to PO Detail Item code only, not the description
6	Qty Received	Yes	12	Numeric	If PO header = “unit price” Format (12.2-)
7	Amount	Yes	12	Numeric	Format (12.2-) – this value does not include sales tax The detail line amount must be the extended dollar amount, not the unit price.
8	Tax code		4	Text	Validate to AP use/sales tax maintenance
9	Image		20	Text	Image or attachment for Invoice

**The following programming logic applies to the PO Item Code (Field 5):

1. Any non-stock items in the import file should be prefixed with an “!” so that the program can validate them to the original Purchase Order.

NOTE: Invoices can still be processed if only a partial amount of the PO line items are received.

IMPORTING THE FILE

Once you select a file to import, the import runs through the programming validation, and provides three possible reports based on the status of the import.

- If no errors have occurred, it will show you the 'PO Receiving Import Details' Report which shows the files that were imported without errors.
- If errors have occurred, then you will get either the 'PO Receiving Import Errors' report or 'Import Failed – Bad Record Error' report, depending on the type of error.

The PO Receiving Import Details Report

This report shows you what invoices were created from the file that was imported, along with any document images that were attached to the Invoice.

AM1 Construction Company Update to A/P Invoice Details										
Job	Phase	Cost Type	Equip. Category Equip. Code	Item Code	Item Description	Received Date	Received Quantity	Received Amount	Invoice Date	Invoice Number
PO#: 15077 Vendor: 456GAR 456 Garden Supply Order Date: 05/21/13										
A/P Invoice image(s) created: 1										
325	02-1000		M	101	1/4" PEA GRAVEL	05/21/13	10.00	\$32.25	05/21/13	15077G
325	02-1000		M	102	3/8" PEA GRAVEL	05/21/13	10.00	\$37.63	05/21/13	15077G
325	02-1000		M	103	1/2" PEA GRAVEL	05/21/13	10.00	\$43.00	05/21/13	15077G
325	02-1000		M	104	5/8" PEA GRAVEL	05/21/13	10.00	\$45.68	05/21/13	15077G
								PO: 15077 Total:		\$158.56
								Report Total: 4 Records Printed		\$158.56

The PO Receiving Import Errors Report

This report provides you with a listing of what errors occurred during the import. Each PO number on this report is posted to the Error Correction screen where the error can be resolved or deleted.

AM1 Construction Company PO Receiving Import Errors	
PO Number	Invoice Number
Vendor: 456GAR 456 Garden Supply	
15077	15077C
Errors: Extra detail line exist for this Purchase Order Invoice already exists in the unapproved invoice file	

The Import Failed – Bad Record Error Report

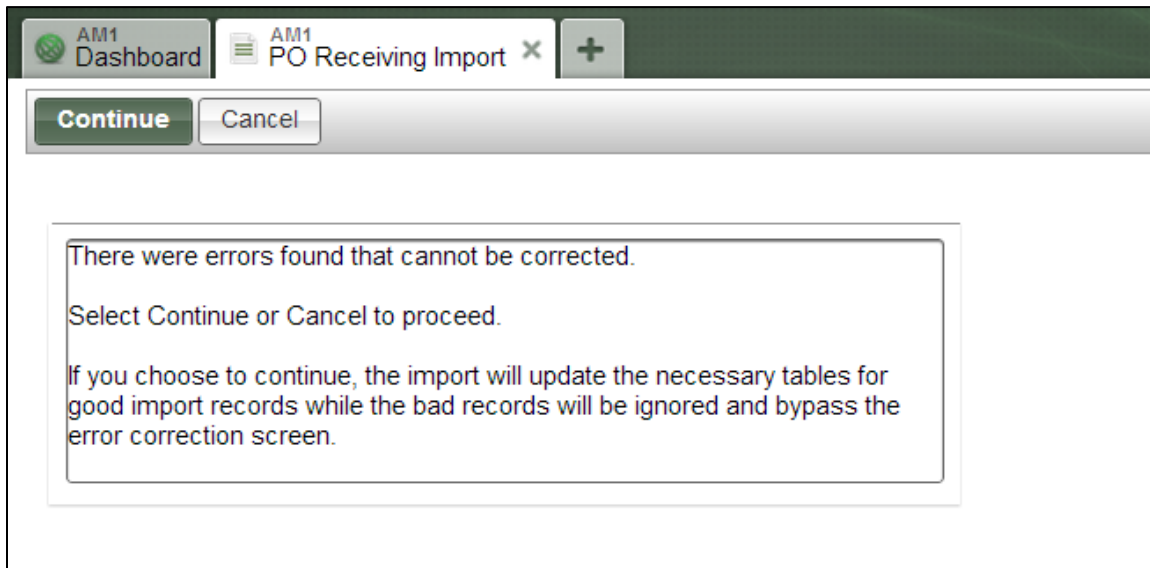
This report prints if the import file contains any invalid record layouts.

Record #	Record Type	Error Message
000001	Header	This record already exists in Error Correction or is a duplicate in the file
000002	Detail	Header records are in error
000003	Detail	Header records are in error
000004	Detail	Header records are in error
000005	Detail	Header records are in error
000006	Detail	Header records are in error
000007	Detail	This record has an invalid format

ERRORS WERE FOUND THAT CAN NOT BE MODIFIED IN ERROR CORRECTION, PLEASE REVIEW THE ERRORS AND DECIDE WHETHER OR NOT TO CONTINUE WITHOUT THESE RECORDS.

If the invoice already sits within the error correction table, or the file has an invalid format (i.e. – too few comma's), the report above prints and tells the user that bad records exist within the import file.

Once the report is created the following screen appears. Select **Continue** to proceed to the 'error correction' screen to fix the specific records, or select **Cancel** to cancel the entire import routine.



The Import Succeeded

If there are no errors during the PO import, AP transactions are created in one of two places:

1. Vendor Invoice entry - waiting to be updated.
2. Invoice Approval – waiting to be routed and confirmed.

The program assigns records to either one of these two places based on the following AP Installation > Invoice Approval Tab shown below:

The screenshot shows a software window titled "AM1 Accounts Payable Installation" with a "Save" button and a "Cancel" button. Below the buttons are several tabs: "Properties", "G/L Codes", "Printing", "Invoice Approval", and "User-Defined". The "Invoice Approval" tab is selected. The settings for this tab are as follows:

- Use Invoice Approval processing?
- Send to A/P Invoice/Credit Memo Entry if no routing code defaults?
- Standard default routing code:
- Invoice dollar limit:
- Default routing code if over limit:
- Default security for new operators:

- If the “Use Invoice Approval processing?” check box **is** selected, the programming routes the transaction to the appropriate operator based on the routing code within the import file. If the routing code is blank for the transaction, the programming uses the default code assigned above.
- If the “Use Invoice Approval processing?” check box **is not** selected and there is a routing code defined for the Invoice, the program sends the transaction to Vendor Invoice Entry waiting to be updated.

Validations

The PO Receiving Import program performs the following validations on all header and detail records within the import file:

- The file must have at least one header and detail record per invoice.
- The purchase order must have an ‘open’ status.
- The file does not contain duplicate invoice numbers. The programming checks the following areas:
 - Vendor Invoice Entry as an ‘un-posted’ invoice.
 - Invoice Approval routing process.
 - The A/P Aged Payables Report as an ‘open’ payable item.
 - The A/P Check Register History Report as a ‘paid’ item.
- The GL Date on the header transaction must be within the AP min/max dates.
- The Invoice amount on the header record must equal the sum of all detail record amounts.
- The Invoice Approval Routing code on the header record (if assigned).

- The 'Credit Card' field on the header record has the following validations:
 - A valid Bank Account Code is defined.
 - A Credit Card number and any Sub Accounts are defined.
- The Tax code on the Invoice detail record (if assigned).
- The Purchase Order (PO) line number and the item code in the import file must match the original PO detail sequence line and the item code (if PO is unit price). If Lump Sum PO, the line numbers on the detail are matched to the PO detail record.
- The Receipt Quantity can't be greater than the Quantity Due on the line item (if PO is unit price). The standard Purchase Order installation screen allows for a percentage overage to be defined. This logic is also taken into account.
- If Purchase Order is 'lump sum' the receipt amount for each line can't be greater than amount ordered.
- The receipt quantity cannot be zero for 'unit price' Purchase Orders.
- The Invoices must be greater or less (credit memos) than zero to be imported.
- The calculated 'unit price' on the import file can't be greater than the original PO detail line 'unit price' after taking in the allowed percentage defined in the custom Tolerance table. This logic does not apply to Lump Sum PO's.
- The Sales tax entered on header record must equal the Sales tax calculated for the individual detail records (after rounding).

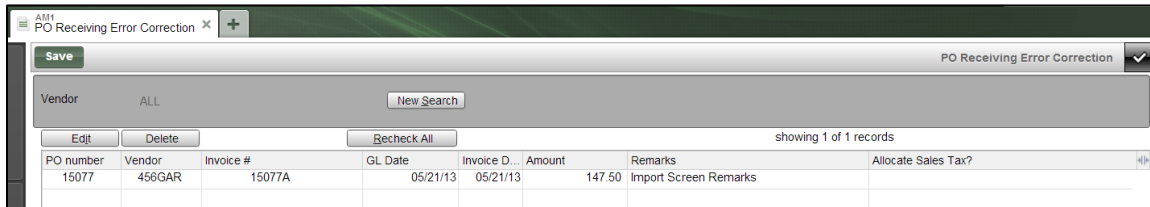
ERROR CORRECTION SCREEN

Sometimes records are "error free" but users want to review the detail line item tax status prior to the invoice being created. This is when the "send to error correction flag" is set to "Y" on the import header record.

Imported transactions that fail the validation rules on the import header record are saved to a custom error correction screen where errors can be resolved or deleted. Once the errors are fixed, the transactions are immediately sent to Vendor Invoice Entry waiting to be updated or are sent through the Invoice Approval process.

If the imported transactions do not pass **ALL** of the above conditions, the records are written to a custom multi-user "error correction screen". If an Invoice number has six detail lines with only one error, the entire record (header and detail lines) is considered an error and can be adjusted within the error correction screen.

Click **Errors** to access the PO Receiving Error Correction screen shown below:

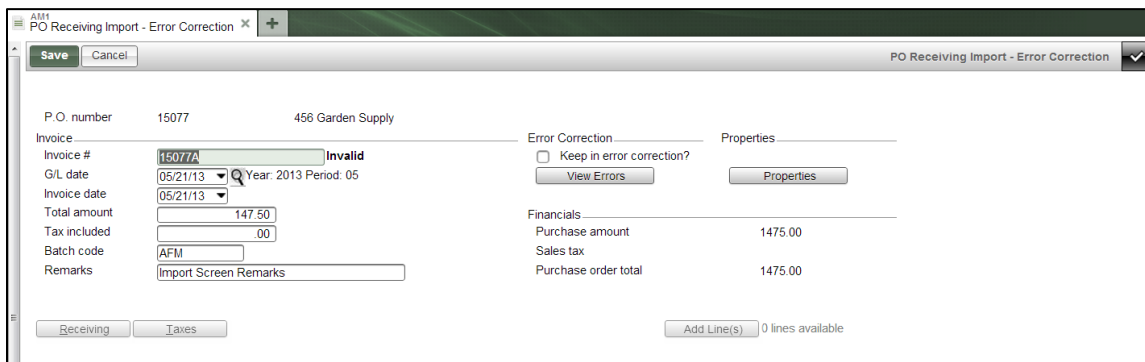


The entire contents of the Invoice (header and detail) are saved to the error correction screen for review. Transactions can be viewed, edited or deleted from this screen. The content of the error correction screen can be “filtered” by Vendor code, which will display only receipts in error for a particular Vendor. Users can see all errors by selecting “ALL”.

Header portion of Error screen

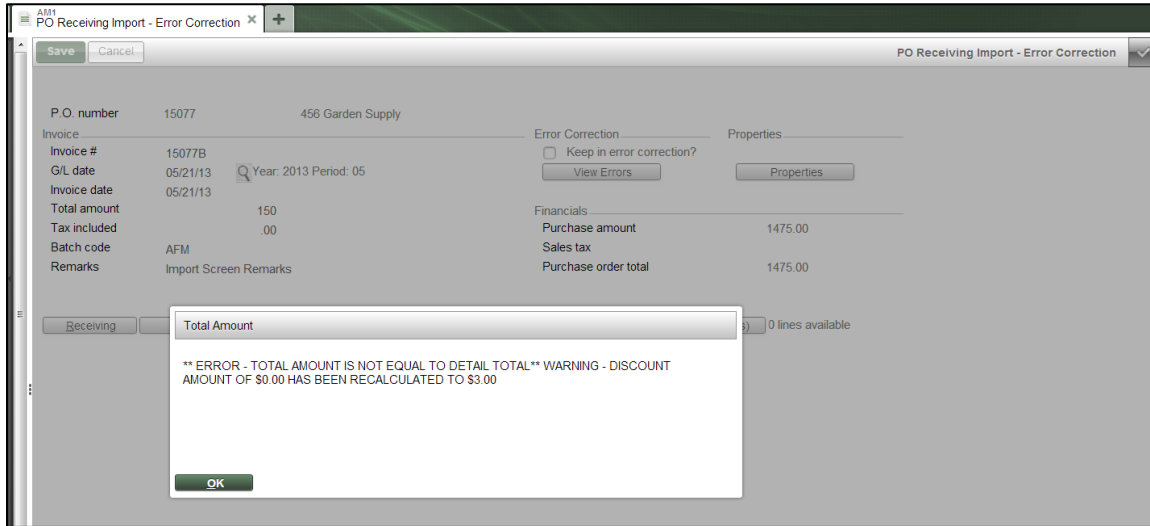
Highlight the transaction to be corrected. Select **Delete** to remove the transaction (the header record and all associated detail lines) from error correction. The original Purchase Order lines will not be changed when a record is deleted.

Select **Edit** to review the record. The following screen appears which displays the error correction PO number header screen:



The above error correction screen displays header records from the import file along with fields from the Purchase Order header. Changes can be made to any field that allows input. When changes are made to any field, validation is happening immediately. Once the errors are corrected, the “Invalid” message disappears.

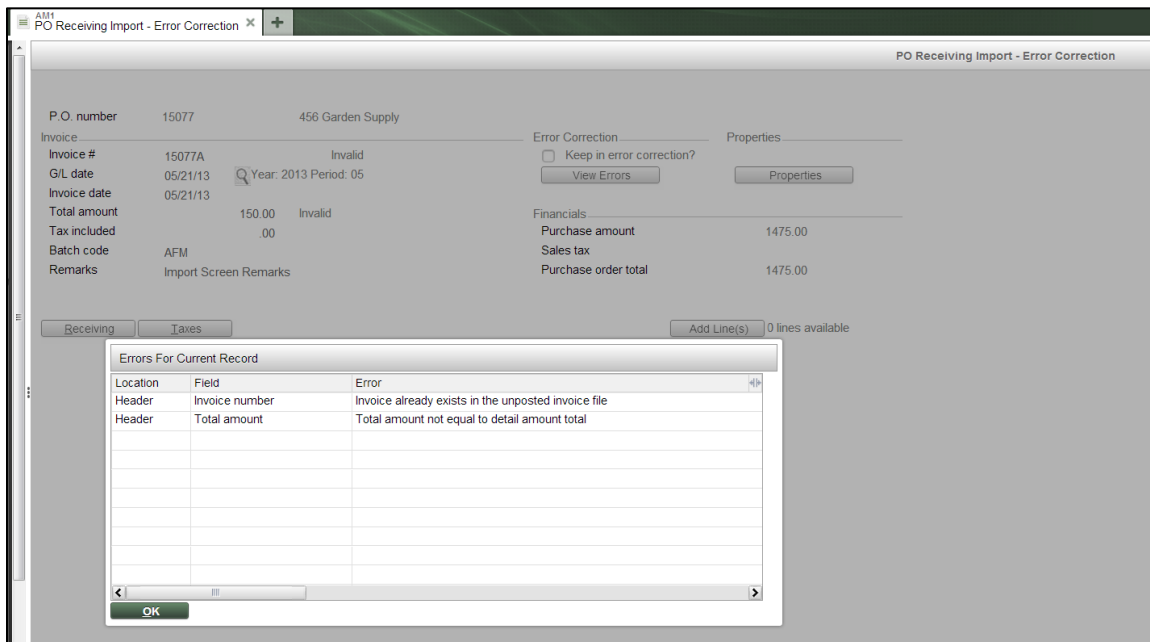
NOTE: If the Invoice amount changes on the main screen, the discount amount is recalculated using the vendor payment terms. The following message will display when this occurs:



There are two buttons on the PO Receiving Import Error Corrections screen which open up additional windows:

- **View Errors** – display errors associated with the transaction (header and detail).
- **Properties** – allows user to change certain header values for the transaction.

Select **View Errors** and a new window opens and lists all the errors associated with the current record as shown below:



Select **Properties** and a new window opens to allow the user to change the following fields:

- Discount amount
- Routing code (if invoice approval is turned on)
- Purchase with credit card check box (if Cash Management is turned on)
 - Credit Card Account
 - Card Number

Detail Line portion of Error screen

Once the header screen has been completed, the following window displays the detail transactions within the screen error and activates the following buttons:

- Receiving
- Taxes
- Add Line(s)

Within the Error Correction detail screen section (shown below), records can be changed but not deleted. If there are invalid details lines, the entire transaction should be deleted from error correction and either fix the import file detail data, or receive the Purchase Order via standard Spectrum one-step receiving.

The error correction screen displays the contents of each Purchase Order detail line, but only the following fields may be changed:

- Quantity Received
- Received Amount

- Terms Discount

Save Cancel PO Receiving Import - Error Correction

P.O. number 15077 456 Garden Supply

Invoice # 15077A Invalid
 G/L date 05/21/13 Year: 2013 Period: 05
 Invoice date 05/21/13
 Total amount 150.00 Invalid
 Tax included .00
 Batch code AFM
 Remarks Import Screen Remarks

Error Correction
 Keep in error correction?
 View Errors Properties

Financials
 Purchase amount 1475.00
 Sales tax
 Purchase order total 1475.00

Receiving Taxes Add Line(s) 0 lines available

Line	Item Code	Error	Description	UM	Qty Due	Qty Received	Non-Taxable Amount	Tax Code	Tax T...	Tax Amt	Terms ...	Unit Cost	F10
001	101	View	1/4" PEA GR...		80.00	10.00	30.00	1700	Use	0.00	0.00%	3.00	
002	102	View	3/8" PEA GR...		80.00	10.00	35.00	1700	Use	0.00	0.00%	3.50	
003	103	View	1/2" PEA GR...		80.00	10.00	40.00	1700	Use	0.00	0.00%	4.00	
004	104	View	5/8" PEA GR...		80.00	10.00	42.50	1700	Use	0.00	0.00%	4.25	

If there are detail line errors, red asterisks will display next to the sequence line on the screen (shown below on detail line 004). Once the line is corrected the red asterisks will disappear.

Save Cancel PO Receiving Import - Error Correction

P.O. number 15077 456 Garden Supply

Invoice # 15077A Invalid
 G/L date 05/21/13 Year: 2013 Period: 05
 Invoice date 05/21/13
 Total amount 150.00 Invalid
 Tax included .00
 Batch code AFM
 Remarks Import Screen Remarks

Error Correction
 Keep in error correction?
 View Errors Properties

Financials
 Purchase amount 1475.00
 Sales tax
 Purchase order total 1475.00

Receiving Taxes Add Line(s) 0 lines available

Line	Item Code	Error	Description	UM	Qty Due	Qty Received	Non-Taxable Amount	Tax Code	Tax T...	Tax Amt	Terms Discount	Unit Cost	F10
001	101	View	1/4" PEA GR...		80.00	10.00	30.00	1700	Use	0.00	0.00%	3.00	
002	102	View	3/8" PEA GR...		80.00	10.00	35.00	1700	Use	0.00	0.00%	3.50	
003	103	View	1/2" PEA GR...		80.00	10.00	40.00	1700	Use	0.00	0.00%	4.00	
004	104	View	*** 5/8" PEA GR...		80.00	10.00	42.50	1700	Use	0.00	0.00%	4.25	

Select **View Errors** to displays the error condition for the header and detail line:

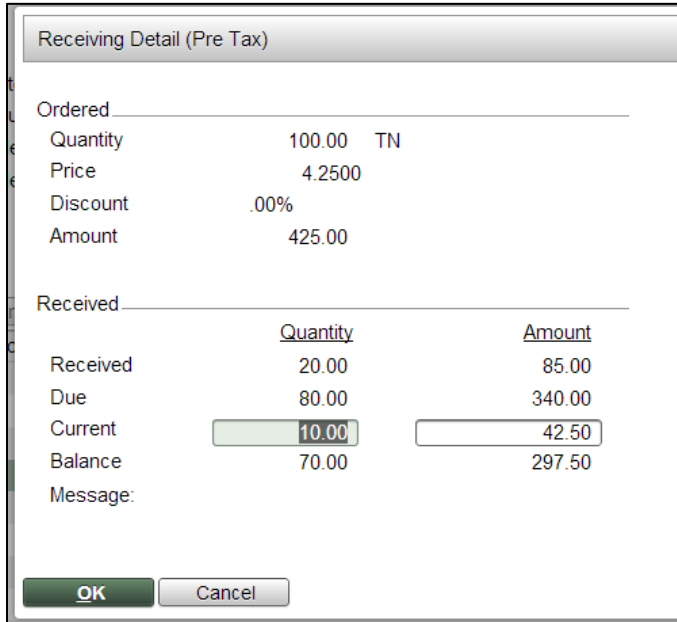
The screenshot shows the 'PO Receiving Import - Error Correction' window. At the top, it displays 'P.O. number 15077' and '456 Garden Supply'. Below this, there are sections for 'Invoice' (Invoice # 15077A, G/L date 05/21/13, Invoice date 05/21/13, Total amount 150.00, Tax included .00, Batch code AFM, Remarks Import Screen Remarks) and 'Financials' (Purchase amount 1475.00, Sales tax, Purchase order total 1475.00). A 'View Errors' button is visible. Below the main window is a table with columns: Line, Item Code, Error, Description, UM, Qty Due, Qty Received, Non-Taxable Amount, Tax Code, Tax T..., Tax Amt, Terms Discount, Unit Cost. The table contains four rows of data for items 101, 102, 103, and 104. An 'Errors For Current Record' dialog box is open, showing a table of errors:

Location	Field	Error
Detail 004	Receipt quantity	Quantity currently receiving must be less then quantity due
Header	Invoice number	Invoice already exists in the unposted invoice file
Header	Total amount	Total amount not equal to detail amount total

The user can either make changes within the detail grid screen (shown above), or click on the button to make the necessary changes by detail line.

Receiving Button

Select **Receiving** to change the quantity and amount fields. Displays the purchase order details and the history of what the balance is for this detail line. This is the same functionality as updating the detail line for “quantity received” and “non-taxable amount”.



Receiving Detail (Pre Tax)

Ordered

Quantity	100.00	TN
Price	4.2500	
Discount	.00%	
Amount	425.00	

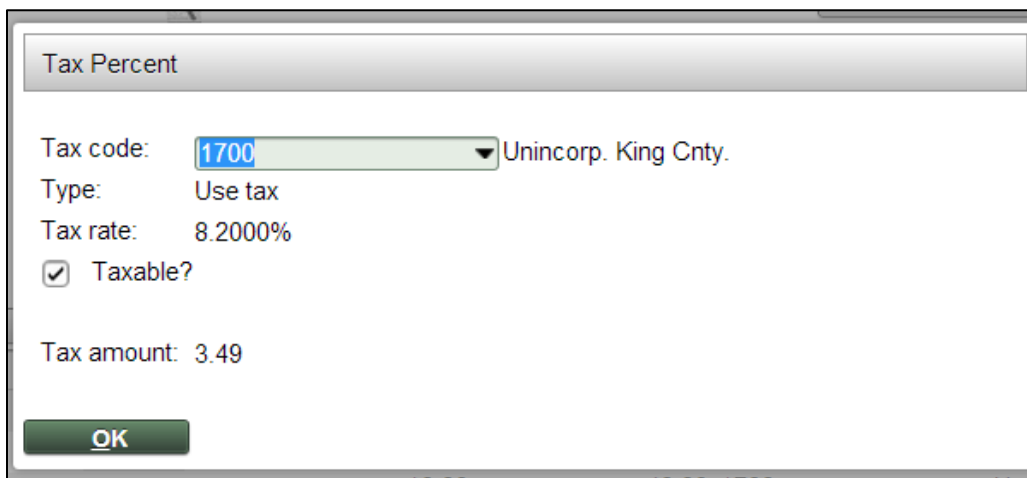
Received

	Quantity	Amount
Received	20.00	85.00
Due	80.00	340.00
Current	<input type="text" value="10.00"/>	<input type="text" value="42.50"/>
Balance	70.00	297.50

Message:

Taxes Button

Select **Taxes** to change the tax code and/or status.



Tax Percent

Tax code: Unincorp. King Cnty.

Type: Use tax

Tax rate: 8.2000%

Taxable?

Tax amount: 3.49

Add Line(s) Button

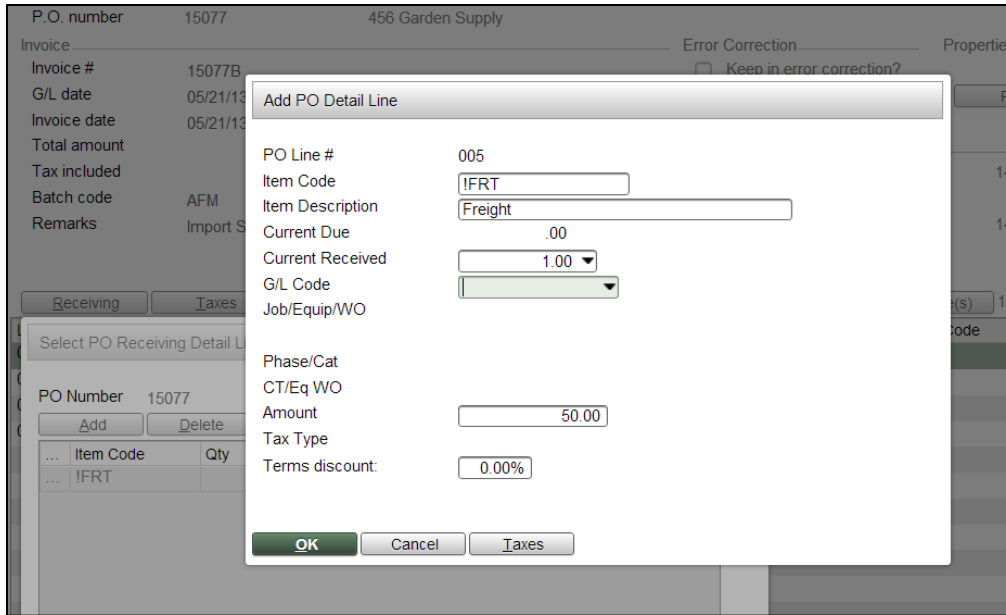
If there are additional line items on the import transaction which do not exist on the purchase order detail record, the following error occurs:

A/P invoices created: 0		Records sent to Error Correction: 1
AM1 Construction Company		
PO Receiving Import Errors		
PO Number	Invoice Number	
Vendor: 456GAR 456 Garden Supply		
15077	15077B	
Errors: Extra detail line exist for this Purchase Order		
Total amount not equal to detail amount total		

Once the transaction is within the “error recovery” screen, the user can select **Add Line(s)** to display all of the imported details records which didn’t have a matching record (line/item code) within the original Purchase Order detail lines.

The records shown in this area can be entered and validated within the Error Correction screen, or deleted from the screen. Once the additional lines are added they become part of the original purchase order.

Highlight the line item in the **Select PO Receiving Detail Lines** screen. Click **Add** to add the line to the purchase order. A new window appears when adding the line to the purchase order to define the additional information needed (shown below). Click **Delete** to remove the detail line.



The contents of the imported detail line (to be added) defaults onto the screen where changes can be modified. The G/L code entered determines what additional fields are available for entry. The following G/L code type will display the following detail fields associated to the G/L code type:

1. Direct Job Cost:
 - a. Job
 - b. Phase
2. Direct Equipment Cost:
 - a. Equipment Code
 - b. Cost Category
3. Direct Work Order Cost:
 - a. Work Order
 - b. Site Equipment
 - c. Component
 - d. Service Contract
 - e. Unit Billing Price
4. Indirect Cost
 - a. No additional data entry fields appear.

In the example below, the General Ledger Account is a Direct Job Cost account code; therefore the job, phase, and cost type fields default the codes entered for the previous line item, but can be overridden.

Add PO Detail Line

PO Line # 005
 Item Code IFRT
 Item Description Freight
 Current Due .00
 Current Received 1.00
 G/L Code 2515
 Job/Equip/WO 325
 Phase/Cat 02-1000
 CT/Eq WO M
 Amount 50.00
 Tax Type
 Terms discount: 0.00%

OK Cancel Taxes

Select **Taxes** to display the tax code for the detail line (if any) and allow changes. Select **OK** to add the line to the detail section, which then adds it to the original Purchase to Order detail record.

PO Receiving Import - Error Correction

P.O. number 15077 456 Garden Supply

Invoice # 15077B
 G/L date 05/21/13 Year: 2013 Period: 05
 Invoice date 05/21/13
 Total amount 197.50 Invalid
 Tax included .00
 Batch code AFM
 Remarks Import Screen Remarks

Error Correction Keep in error correction?
 View Errors Properties

Financials
 Purchase amount 1475.00
 Sales tax
 Purchase order total 1475.00

Receiving Taxes Add Line(s) 0 lines available

Line	Item Code	Error	Qty Received	Non-Taxable Amount	Tax Code	Tax T...	Tax Amt	Terms Discount	Unit Cost	Prior qty received	Prior \$ r(4)
001	101	View	80.00	10.00	30.00 1700	Use	2.46	0.00%	3.00	20.00	
002	102	View	80.00	10.00	35.00 1700	Use	0.00	0.00%	3.50	20.00	
003	103	View	80.00	10.00	40.00 1700	Use	0.00	0.00%	4.00	20.00	
004	104	View	80.00	10.00	42.50 1700	Use	0.00	0.00%	4.25	20.00	
005	IFRT	View	1.00	1.00	50.00 1700	Use	0.00	0.00%	50.00	0.00	

Final Validation

The final step to completing the PO Receiving Import - Error Correction screen is to save the changes. Select **Save** to begin the final validation to confirm the PO is in balance. The header amounts (Total Amount and Sales Tax) are assumed to be correct.

If there is a difference between the header and detail totals, then the programming allocates the difference to the detail lines instead of changing the Invoice header amount. If the difference can be allocated to the detail (.01 cents per line – increase or decrease) for tax and non-tax detail lines, the programming changes the detail merchandise and tax amounts to balance the header and detail totals.

If the difference between the detail lines and the header invoice amount exceed the .01 cent per line logic used, then the allocation is based on whether or not the detail lines has tax assigned. The 'Out of Balance' allocation is defined below for the following types:

- Non-tax allocation
- Tax allocation

Non-tax allocation

If the header and detail lines are not in balance, the following screen displays:

Out of Balance	
Invoice amount:	150.00
Distributed amount	147.50
Balance	2.50

Options

Continue editing receiving entry

Delete receiving entry

Set invoice total equal to detail

OK

- **Continue editing receiving entry** - allows modifications to be made to the Error Correction header and detail records by the user to bring them into balance.
- **Delete receiving entry** – this removes the transaction from the Error Correction screen. The PO details lines are not received and no AP Invoice is created.
- **Set Invoice total equal to detail** - changes the Invoice total to match the detail amounts.

Tax Allocation

If a transaction within the error correction screen has sales tax assigned to the detail lines, the calculated sales tax for all detail lines must equal the tax amount on the invoice header. The programming, within the error correction screen, applies the same rules when trying to allocate the sales tax differences between the header and detail lines (.01 cents per sales taxable line). If there is an excess amount that can't be allocated, the programming displays the following message:

Sales Tax Allocation

Tax amount entered

Calculated tax 7.88

Difference .24

Once the message box appears, it contains three buttons on the window. Each button has different functionality which is defined below:

- **OK** - takes the user back to error correction where changes can be made to the detail line or the invoice header tax amount.
- **Allocate** - allocates the difference (up or down) across all the taxable detail line items until the header tax and the detail tax amounts are equal.
- **Tax Detail** - allows the user to change tax codes or taxable status to try and correct the difference.

Once the Invoice is 'error free' it leaves the error correction screen and creates the AP un-posted invoice as shown in the report below:

A/P Invoices created: 1 Records left in Error Correction: 0											
AM1 Construction Company											
Update to A/P Invoice Details											
Job	Phase	Cost Type	Equip. Category	Equip. Code	Item Code	Item Description	Received Date	Received Quantity	Received Amount	Invoice Date	Invoice Number
PO#: 15077 Vendor: 456GAR 456 Garden Supply Order Date: 05/21/13											
325	02-1000		M		101	1/4" PEA GRAVEL	05/21/13	10.00	\$30.00	05/21/13	15077D
325	02-1000		M		102	3/8" PEA GRAVEL	05/21/13	10.00	\$35.00	05/21/13	15077D
325	02-1000		M		103	1/2" PEA GRAVEL	05/21/13	10.00	\$40.00	05/21/13	15077D
325	02-1000		M		104	5/8" PEA GRAVEL	05/21/13	10.00	\$42.50	05/21/13	15077D
325	02-1000		M		IFRT	Freight Charge	05/21/13			05/21/13	15077D
									PO: 15077 Total:	\$147.50	
Report Total: 5 Records Printed									\$147.50		

PO RECEIVING: ADD ITEMS ON THE FLY

The Purchase Order Receiving program has been enhanced to allow items to be added directly to the purchase order detail without having to go through the manual steps in the error recovery screen.

Viewpoint has programmed a custom item maintenance table to enter non-stock item codes that may come in on a purchase order and that were not part of the original order. These items (in the current logic) cause the Purchase Order Receipt to hit the error recovery screen where the user can choose to either add / delete the extra line item.

The programming checks the custom item maintenance table and if it passes validation, the record is no longer in error. This item is added both to the purchase order detail and the A/P invoice and all quantities are received.

NOTE: If the 'error correction' flag is set on the incoming record, the transactions hit error correction whether or not there are items on the custom item maintenance table.

The custom table can be accessed via the PO Receiving Import screen. There is a new button called "Item Maintenance" where non-stock item codes and the following data points can be entered:

Item code	Item description	G/L code	G/L description	Job/Equipment/WO	Phase/Cat/Contract	CT/Eq WO	Tax code	Tax code description
IADD	Additional line items	1725	Miscellaneous Expenses				1714	ISSAQUAH
IFRT	Freight							
IMISC	Miscellaneous				RP			

Item Code – Only non-stock items can be entered in this field. Entry is required.

Description – Enter a description for the non-stock item.

G/L Code – Lookup and validation to G/L Maintenance. **Entry is optional.**

Entry into the fields below is optional. If the G/L code is left blank, the item code assumes the previous purchase order sequence line defaults when adding the item. If an item is always to be "hard-coded" to a selected value, enter the value into the required fields. If the G/L account is "direct cost", the prompts associated with the direct cost account are mandatory.

Job/Equip/WO – Lookup and validation; optional entry based on G/L code direct flag.

Phase/Cat/Contract - Lookup and validation; optional entry based on G/L code direct flag.

CT/Eq WO - Lookup and validation; optional entry based on G/L code direct flag

Tax Code - Lookup and validation; optional entry.

Tax hierarchy:

1. PO Receiving Import file
2. Custom Item Table

Tax is the only item that is NOT assigned from the previous line (described below).

Logic Rules

1. If the G/L code is non-blank, use the fields from custom table (see !ADD example #1 below).
2. If the G/L code is blank, use the previous sequence line on the import file along with any prompts from the custom table (see !MISC example #2 below).
3. If the G/L code is blank, and there are no prompts assigned to the item, pull all values directly from the previous sequence line on the import file (see !FRT example #3 below).

Example 1 (indirect non-stock item added to the PO)

The following purchase order has four non-stock items where the first two items are direct job cost, line 003 is direct equipment cost, and line 004 is direct work order cost.

Purchase Order Entry

Purchase order 2072

Vendor: BOICAS BOISE CASCADE

Warehouse: 2 CALIFORNIA WAREHOUSE ARC

Financials

Purchase amount	280.00
PST	
Purchase order total	280.00

Purchase order status: Open

Current revision: 000

Line	Qty	Quantity	Item code	Item description	...	Unit price	Discou...	Extensio...	G/L account	G/L...	Job	Phase	Ct	Equipment	Cost category	Work order
001	D	20.00	INS	non-stock item 1	No	5.0000	0.00%	100.00	2515	Di...	INTSTA	00-001	M			
002	D	20.00	INS1	Non-stock 2	No	3.0000	0.00%	60.00	1515	Di...	WINDEL	00-020	M			
003	D	20.00	INS3	non-stock3	No	2.0000	0.00%	40.00	2222	T...				DTK45	MP	
004	D	20.00	INS4	non-stock4	No	4.0000	0.00%	80.00	2223	Di...						800

The PO Receiving Import file for the above has the following items:

```
2072 - Notepad
File Edit Format View Help
H,2072,ABC,2072-A,12/15/15,12/15/15,19.05,,,,,,5035262303~F12072-A43.pdf,.05
D,2072,2072-A,001,!NS,1,5,,
D,2072,2072-A,002,!NS1,1,3,,
D,2072,2072-A,003,!NS3,1,2,,
D,2072,2072-A,004,!NS4,1,4,,
D,2072,2072-A,005,!ADD,1,5,TAX,|
```

Here is the Accounts Payable invoice which was created by this import file:

Line	Comp	G/L account	Equipment	Cos...	Work order	Item code	L...	Unit cost	Remark	Tax code	Tax type
001	SP2	2515				INS	...	5.00	non-stock item 1		
002	SP2	1515				INS1	...	3.00	Non-stock 2		
003	SP2	2222	DTK45	MP		INS3	...	2.00	non-stock3		
004	SP2	2223			800	INS4	...	4.00	non-stock4		
005	SP2	1725				IADD	...	5.00	Additional line ...	TAX	Sales (1.0000%)

In the above example line 005 was created with item “!ADD” from the custom table. The G/L account was assigned from the custom table while the tax code was assigned via the import file above “TAX” for sequence 005.

Example 2 (G/L code blank with no prompts for item “!FRT”)

The PO Receiving Import file has the following items:

```

2072-B - Notepad
File Edit Format View Help
H,2072,ABC,2072-C,12/15/15,12/15/15,8|.00,,,,,,,,,5035262303~F12072-A43.pdf,
D,2072,2072-B,002,!NS1,1,3,TAX,
D,2072,2072-B,006,!FRT,1,5,,
  
```

In the following example, line 002 is the only item that is being received outside of the item to be added (!FRT). Line 006 (when added) assumes the purchase order defaults from sequence 002 because the custom table does not have any G/L code assigned to !FRT.

Batch: ABC | Unposted Batch: \$ 27.08 (2 Transactions)

Vendor: BOICAS

Invoice #: 2072-B | Job: WINDEL (Windelmuller)

Invoice type: Invoice

Purchase order: 2072

G/L date: 12/15/15 | Fiscal year: 2014 | Period: 12

Invoice date: 12/15/15

Total before tax: 8.00

PST: .03

Total amount: 8.03

Payment plans:

- Pay-when-paid?
- Payment due: 01/23/16
- Holdback: 0.00%
- Holdback amount: []
- Hold payment?

Cheque / Credit Card: Unpaid

Line	Comp	G/L account	Amount	G/L descri...	Job	Phase	Ct	Item code	Unit cost	Remark	Tax code
001	SP2	1515	3.00	Direct MA...	WINDEL	00-020	M			INS1	3.00			Non-stock 2	TAX
002	SP2	1515	5.00	Direct MA...	WINDEL	00-020	M			IFRT	5.00			Freight	

The !FRT item incorporates the same prompts from PO Detail sequence line 002. The only difference is the TAX code because TAX came in on the last receipt.

Example 3 – (G/L code blank, prompts exist for the item !MISC)

The PO Receiving file has the following:

```

File Edit Format View Help
H, 2072, ABC, 2072-C, 12/15/15, 12/15/15, 7.00, ..., 5035262303~F12072-A43.pdf ,
D, 2072, 2072-C, 003, !NS3, 1, 2, ,
D, 2072, 2072-C, 007, !MISC, 1, 5, ,
  
```

Vendor Invoice

Save Cancel Delete

Batch: ABC Unposted Batch: \$ 34.08 (3 Transactions)

Vendor: BOICAS

Invoice #: 2072-C

Invoice type: Invoice

Purchase order: 2072

G/L date: 12/15/15 Fiscal year: 2014 Period: 12

Invoice date: 12/15/15

Total before tax: 7.00

PST:

Total amount: 7.00

Payment plans:

Pay-when-paid?

Payment due: 01/23/16

Holdback: 0.00%

Holdback amount:

Hold payment?

Cheque / Credit Card: Unpaid

More Info Routing User-Defined

Line	Comp	G/L account	Amount	G/L descri...	Job	Phase	Ct	Equipment	Cost category	Item code	Unit cost	Remar
001	SP2	2222	2.00	TEST 2				DTK45	MP	INS3	2.00	non-st
002	SP2	2222	5.00	TEST 2				DTK45	RP	IMISC	5.00	Miscel

In the above example, item !MISC has the same G/L & Equipment Code but the Cost Category is different due to the custom table had a value of RP defined.

The programming performs validation on any entered value within the custom table. If the item fails, the item to be added gets sent to error recovery screen where it can be added manually, like before.

Receive Invoice Button

Besides the custom item maintenance table, there is a new button within the error correction screen called "Receive invoice." This new button allows multiple invoices with the same purchase order to be received directly. Simply place the cursor on the selected invoice record and click the "Receive invoice" button. This eliminates the need to go through the error correction header and detail screens for each transaction.

There is also one final change to the validation logic, and that is to NOT error out a detail record if there is zero quantity or zero dollar amounts. In the original design logic, the programming assumes that all invoice details have quantities or dollars; if they didn't, the record would drop into error correction. The new programming logic will ignore detail lines with this criteria and not drop the invoice into error correction.

MISCELLANEOUS OPTIONS

Invoice Approval

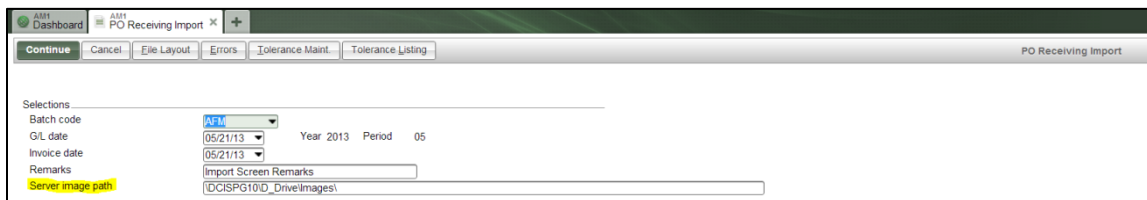
The custom import creates AP transactions similar to the standard purchasing one-step receiving process. The custom program looks to the AP Installation screen to determine if Invoice Approval is used. The hierarchy for AP Invoice approval routing is as follows:

1. Default to the import file's header record.
2. Default next to the routing code defined on the Purchase Order header.
3. If PO header routing is blank, then apply standard Spectrum routing hierarchy as follows:
 - a. Job – check limits
 - b. Vendor – check limits
 - c. AP installation – check limits
4. Send to Vendor Invoice Import if no routing exists and the check box in the AP Installation screen is selected. Otherwise the transaction is wrong and will reside within error correction.

Document Image creation

The custom import allows image(s) to be added to each invoice. Images can be attached to either the header or detail records and exists in the default start screen image directory. Due to the complexity and time it takes to import images attached to the invoices within the import, we recommend that you limit the total number of import records to less than 1000 (i.e. combined header and detail lines).

Prior to running the custom import routine, all image files (.tiff, .gif, .pdf, etc.) should be saved directly to the server. The location of these files on the server is defined on the custom start screen. The programming logic will create a Document Imaging record if it finds a match between the attachment name located on the header or detail record and the start screen image path. If the image does not exist within the start screen path (shown in the screen below) but are defined within the import file, Document Imaging records are not created.



The screenshot shows a software interface for 'PO Receiving Import'. At the top, there are tabs for 'Continue', 'Cancel', 'File Layout', 'Errors', 'Tolerance Maint.', and 'Tolerance Listing'. Below the tabs, there is a 'Selections' section with the following fields:

Batch code	AFM	Year	2013	Period	05
GI date	05/21/13				
Invoice date	05/21/13				
Remarks	Import Screen Remarks				
Server image path	DCISPG10D_Drive\Images\				

The following report below displays an Invoice where the Document Image was not created due to the image on the import file not being found within the image path on the start screen.

AM1 Construction Company Update to A/P Invoice Details											
Job	Phase	Cost Type	Equip. Category	Equip. Code	Item Code	Item Description	Received Date	Received Quantity	Received Amount	Invoice Date	Invoice Number
PO#: 15077 Vendor: 456GAR 456 Garden Supply Order Date: 05/21/13											
A/P Invoice image(s) errors: 1											
325	02-1000		M		101	1/4" PEA GRAVEL	05/21/13	10.00	\$32.25	05/21/13	15077F
325	02-1000		M		102	3/8" PEA GRAVEL	05/21/13	10.00	\$37.63	05/21/13	15077F
325	02-1000		M		103	1/2" PEA GRAVEL	05/21/13	10.00	\$43.00	05/21/13	15077F
325	02-1000		M		104	5/8" PEA GRAVEL	05/21/13	10.00	\$45.68	05/21/13	15077F
									PO: 15077 Total:		\$158.56
Report Total: 4 Records Printed											\$158.56

The following report below displays an Invoice where the Document Image was created due to the image on the import file not being found within the image path on the start screen.

AM1 Construction Company Update to A/P Invoice Details											
Job	Phase	Cost Type	Equip. Category	Equip. Code	Item Code	Item Description	Received Date	Received Quantity	Received Amount	Invoice Date	Invoice Number
PO#: 15077 Vendor: 456GAR 456 Garden Supply Order Date: 05/21/13											
A/P Invoice image(s) created: 1											
325	02-1000		M		101	1/4" PEA GRAVEL	05/21/13	10.00	\$32.25	05/21/13	15077G
325	02-1000		M		102	3/8" PEA GRAVEL	05/21/13	10.00	\$37.63	05/21/13	15077G
325	02-1000		M		103	1/2" PEA GRAVEL	05/21/13	10.00	\$43.00	05/21/13	15077G
325	02-1000		M		104	5/8" PEA GRAVEL	05/21/13	10.00	\$45.68	05/21/13	15077G
									PO: 15077 Total:		\$158.56
Report Total: 4 Records Printed											\$158.56

When the invoice is valid and the images on the import file exist in the image path, the image(s) are created within the Document Imaging master table as shown below:

Transaction description	Cabinet	Drawer	Folder	Keywords
A/P Invoice 15077G	VENDOR	AP INVOICE	456GAR	456 Garden Supply 15077G INVOICE 0

In this example the image is stored in the following location (shown above) and displays the following information:

- Transaction description = "A/P Invoice" + Invoice Number
- Cabinet = VENDOR
- Drawer = AP INVOICE
- Folder = Vendor Code assigned to the Purchase Order receipt

Tax Issues

The programming uses the tax amount (sales tax only) defined on the import header record to compare against the detail tax calculated to see if the transaction is in balance regarding sales tax.

Tax codes are validated as part of the detail line import process. If there are no tax codes defined on the imported detail record, the programming uses the tax status (sales, use, or no tax) based on the Purchase Order detail line. If a tax code is imported on the detail line, the code is validated and changes the tax status on the Purchase Order detail once the Accounts Payable Invoice is created.

If the calculated detail line sales tax amount is different than the invoice header tax amount, the transaction goes to the error correction where tax can either be changed or allocated across all the detail lines items.

Purchased with Credit Card

The Purchase Order receipt can be pre-paid if the header record contains credit card information or the “Purchase with Credit Card” check box is selected within the error correction screen:

Properties			
P.O. number	452		
Account			
A/P G/L account	205-0	ACCOUNTS PAYABLE: TRADE	
Vendor		Payment	
Code	AAAIN1	Payment date	07/03/13
Name	AAA INDUSTRIAL SUPPLY		
Address	25877 Martin Luther King Way, Bldg 4005, Suite 659 KENTTTTTTTTTTTTTTTTTTTTTT, WA 98042		
Credit card charge		<input type="checkbox"/> On hold?	
<input checked="" type="checkbox"/> Purchased with credit card?		Discount date	06/13/13
Credit card account	MC8540	Discount amount	49.50
		Charge amount	2,475.00
G/L liability account	3210	Transaction date	06/04/13
CREDIT CARD LIABILITY ACCOUNT			
Card #	01		
OK Cancel			

Both the credit card account and card # fields have lookup and validation based on the Cash Management module. Once these two fields are populated, the charge amount defaults based on the invoice amount and the transaction date defaults based on the current processing date.

When the transaction is “error free” and it leaves error correction it posts to Accounts Payable. When the A/P transaction update process is run, the following report displays:

Accounts Payable Credit Card Purchase Register											
Credit card account: MC8540 MASTERCARD 8540											
Card Number	Trans Date	Vendor	Invoice / Credit Number	Type	Job Number	Invoice / Credit Amount	Previously Applied	Discount Date	Discount Amount	This Amount	Retention Paid
01	06/03/13	AAAIN1	AAA INDUSTRIAL SUPPLY 452E	I		(206) 631-6592 2,475.00		06/13/13	49.50	2,475.00	0.00
						Transaction Total:	2,475.00		49.50	2,475.00	0.00
						Account Total:	2,475.00		49.50	2,475.00	0.00

Cost Center Logic

If cost centers are turned on for a particular Spectrum company, cost center assignment for the Accounts Payable invoice is based on the cost centers entered on the Purchase Order header and detail line items. The custom import routine does not change the cost centers from what was originally entered on the Purchase Order.