



Shopify Integration

Megan De Freitas - 2025-06-12 - Extended Modules

Overview

Cavallo's integration with Shopify handles automatic syncing of inventory and sales information between SalesPad/GP and a Shopify website. Product and inventory level information is pushed from SalesPad to the website so that customers have visibility of which products are available. Sales orders created by customers on the website are pulled down to SalesPad so that they can be processed and fulfilled. Payment information can also be imported from the website for visibility in SalesPad. After fulfillment and tracking information is updated for each sales order in SalesPad, this information is pushed to the website for customer visibility. If sales orders are voided in SalesPad or GP, those updates are communicated back to the website.

This document covers configuration for all components of the Shopify integration.

Table Of Contents

- [General Information On Expressions](#)
- [Product Export](#)
- [Inventory Level Export](#)
- [Customer and Order Import](#)
- [Order Update Export](#)
- [Order Voided Export](#)
- [GraphQL and SalesPad Model Differences](#)

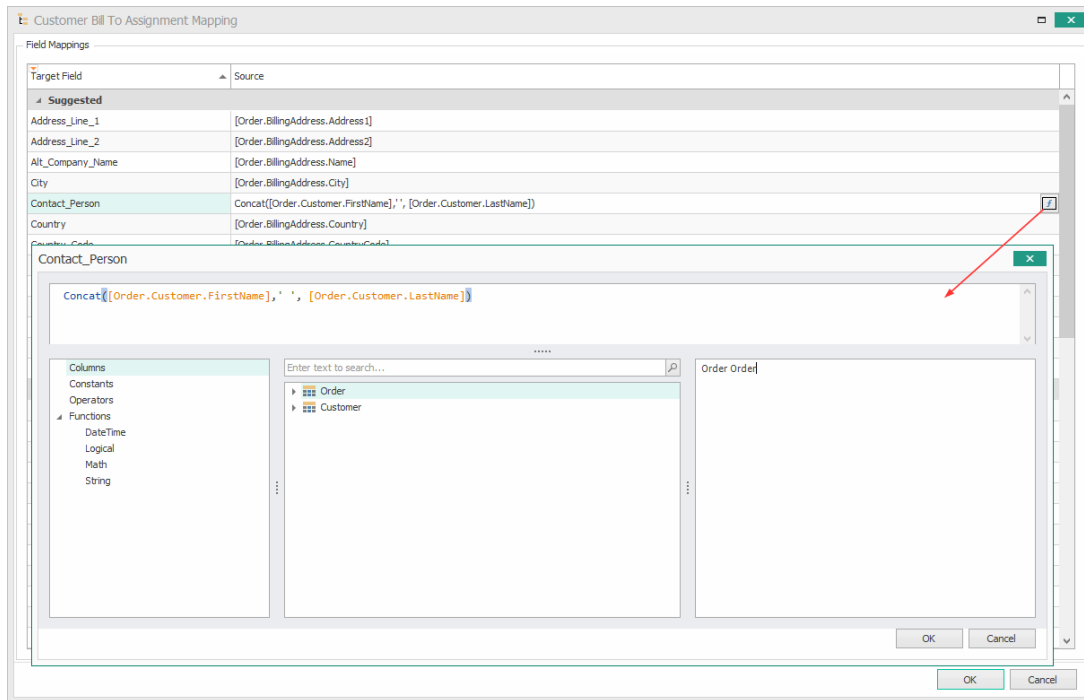
General Information On Expressions

Overview

Many integration settings allow the use of expressions to configure how internal and external entities should be matched, or to designate which values are assigned from external to internal entities.

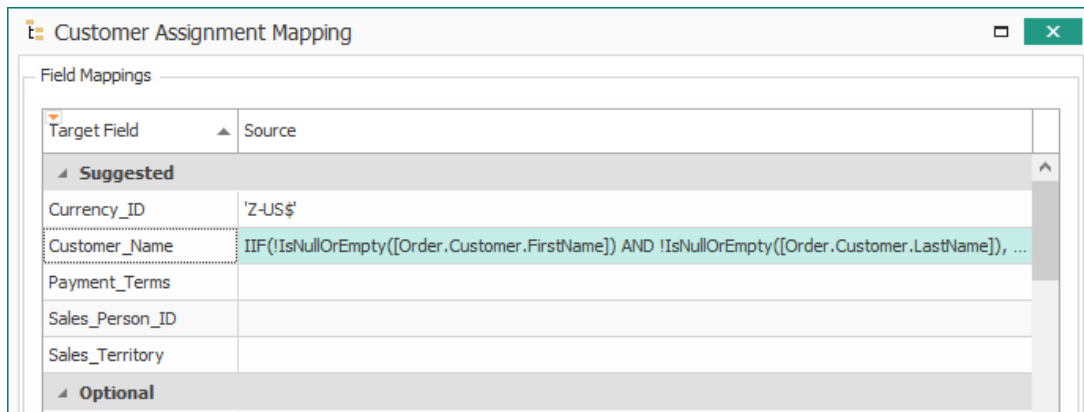
Each expression editor will have a set of source objects to match or map from, and a set of destination objects to be matched or populated. These editors allow additional complexity beyond simply mapping source object fields to destination object fields.

As an example, below is the default expression for Customer Bill To Assignment Mapping - Contact_Person. In this case, the Shopify order is the source object, and a SalesPad CustomerAddr is the destination object. When a new SalesPad CustomerAddr is created in the process of creating a customer for an imported order, this expression is used to populate the Contact_Person field.

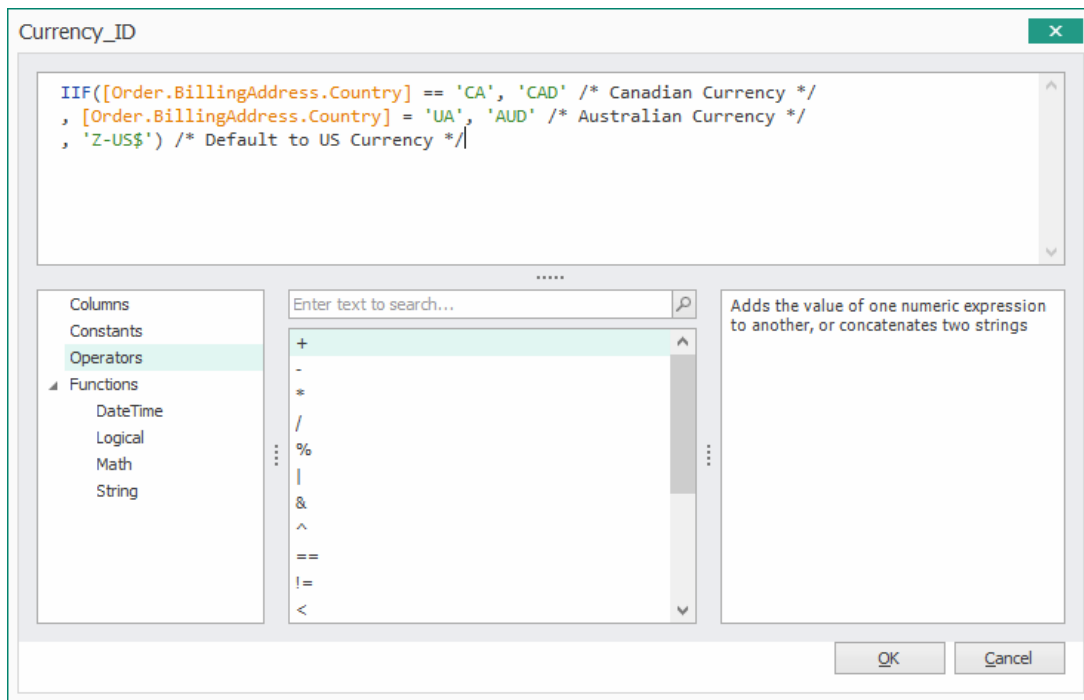


Rather than a single customer name field with the customer’s full name, Shopify has separate first and last name fields, so the Contact_Person field cannot be populated by simply mapping one field to another. The Concat function is used to append the Shopify Customer last name to the first name, with a space in between. If the customer’s first name is “Jane” and last name is “Doe”, the Contact_Person field will be “Jane Doe”.

Expression editors can also be used to assign hard-coded values when populating fields. In the below example configuration of the Customer Assignment Mapping setting, all customers will be created with value “Z-US\$” in the Currency_ID field.



For an example of a more complex use case, the below expression includes an IIF (if statement) conditional. Comments may be included to provide notes for future reference.

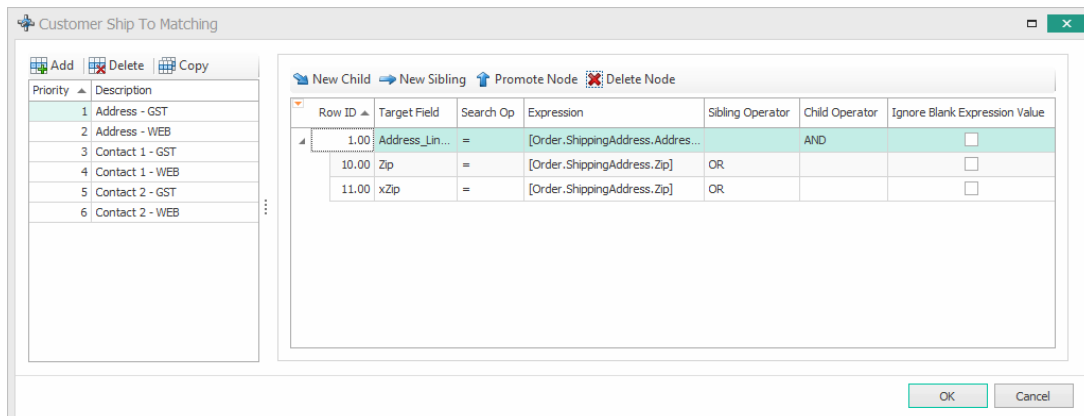


The complete expression language documentation can be found [here](#).

Sibling and Child Relationship

A combination of sibling and child expressions can be used during matching. The expressions can be joined using logical operators such as AND, OR, etc.

For example, to match a customer address on Address Line 1 field and Zip field or xZip user field, set the Address Line 1 child operator to AND and the Zip and xZip sibling operator to OR:



Product Export

Overview

The Product Export updates products in Shopify based on new and changed item masters in SalesPad. Products which exist in both systems are updated in Shopify, and products which do not yet exist in Shopify are automatically created as part of this process. This component provides flexibility to specify which items and associated values are pushed to Shopify.

General Settings

Forward Item Master After Initial Export - If set to True, the product export will forward item masters when they're first exported to Shopify. Defaults to 'False'.

Product Export Page Size - Determines the maximum number of Shopify products that SalesPad will export in a single API call. Defaults to '2500'.

Matching Settings

Product Item Master Matching - Define the mappings for looking up the Item Master for the Product Export.

The 'Product Item Master Matching' dialog box features a left-hand grid with 'Add', 'Delete', and 'Copy' buttons. The grid contains one row with 'Priority' 1 and 'Description' 'Sku'. To the right, a toolbar includes 'New Child', 'New Sibling', 'Promote Node', and 'Delete Node'. Below this is a table with columns: 'Row ID', 'Target Field', 'Search Op', 'Expression', 'Sibling Operator', 'Child Operator', and 'Ignore Blank Expression Value'. A single row is present with '0.00' in the Row ID, 'Item_Number' in the Target Field, '=' in the Search Op, and '[Variant.Sku]' in the Expression. The 'Ignore Blank Expression Value' checkbox is unchecked. 'OK' and 'Cancel' buttons are at the bottom right.

| Row ID | Target Field | Search Op | Expression | Sibling Operator | Child Operator | Ignore Blank Expression Value |
|--------|--------------|-----------|---------------|------------------|----------------|-------------------------------|
| 0.00 | Item_Number | = | [Variant.Sku] | | | <input type="checkbox"/> |

Lookup Settings

Product Export Filter - Define the criteria for determining which items export to Shopify.

Only one priority row should be added to the left grid. The conditions on the right will be used to determine which Item Masters will be exported to Shopify. In the example below, the system will export all items that start with HD-.

The 'Product Export Filter' dialog box has a similar layout to the matching dialog. The left grid shows 'Priority' 1 and 'Description' 'Hard Drives'. The right table has columns: 'Row ID', 'Target Field', 'Search Op', 'Expression', 'Sibling Operator', 'Child Operator', and 'Ignore Blank Expression Value'. The single row contains '0.00' in the Row ID, 'Item_Type' in the Target Field, 'LIKE' in the Search Op, and 'HD-%' in the Expression. The 'Ignore Blank Expression Value' checkbox is unchecked. 'OK' and 'Cancel' buttons are at the bottom right.

| Row ID | Target Field | Search Op | Expression | Sibling Operator | Child Operator | Ignore Blank Expression Value |
|--------|--------------|-----------|------------|------------------|----------------|-------------------------------|
| 0.00 | Item_Type | LIKE | HD-% | | | <input type="checkbox"/> |

Assignment Settings

Product Assignment Mapping - Define the mappings to be used when exporting a Product.

Product Variant Assignment Mapping - Define the mappings to be used when exporting a Product Variant.

Product Variant Assignment Mapping

Field Mappings

| Target Field | Source |
|-----------------|--|
| Optional | |
| Barcode | [ItemMaster.UserDefinedFields.xUPC] |
| CompareAtPrice | |
| Id | |
| Price | [ItemMaster.val_List_Price] |
| Sku | [ItemMaster.val_Item_Number] |
| Taxable | True |
| TaxCode | |
| Tracked | True |
| Weight | [ItemMaster.val_Item_Shipping_Weight] |
| WeightUnit | IIf([ItemMaster.UserDefinedFields.xWeight... |

OK Cancel

Scripts

Product Pre Export Script - A C# Script that runs before a Product is exported.

Processing

The Product Export bulk loads products from Shopify and matches them to item masters in SalesPad based on the Product Item Master Matching setting. The Product Export Filter is used to filter out any items which should not be exported to Shopify. Then products that already exist in Shopify are updated if their corresponding SalesPad item has changed, and products that do not yet exist in Shopify are automatically created.

Both creation and updates use the same Product Assignment Mapping so that fields are updated the same way. Product variant information for both creation and updates is updated based on the Product Variant Assignment Mapping.

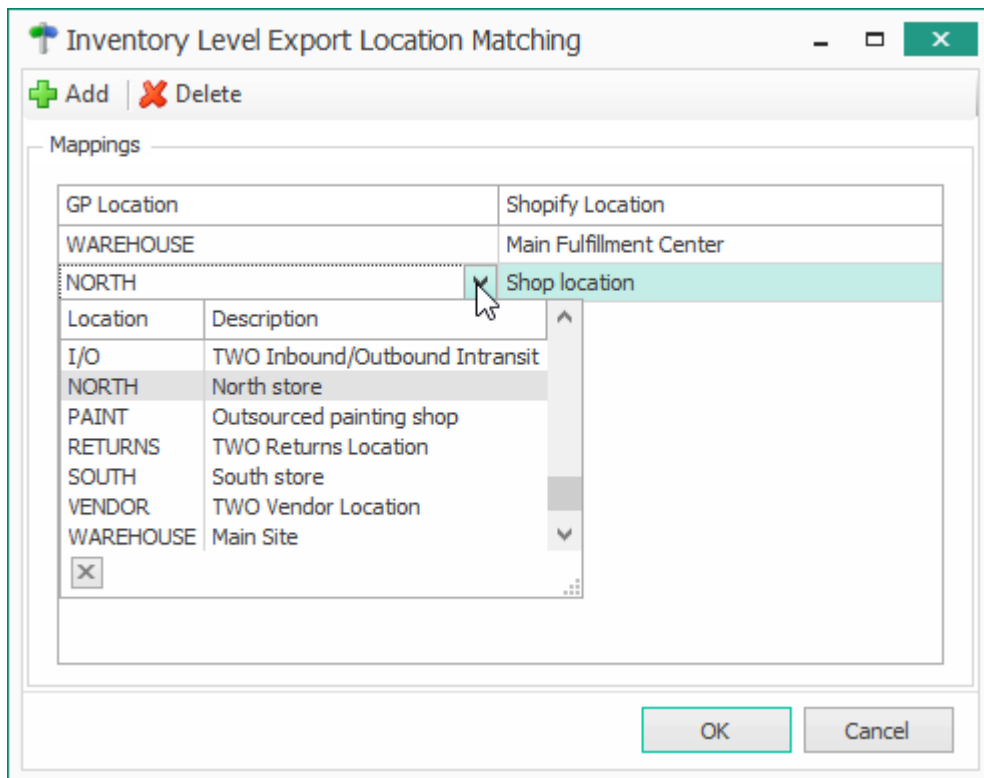
Inventory Level Export

Overview

The Inventory Level Export updates item availability information in Shopify based on current inventory levels in SalesPad warehouses. This ensures that customers placing orders on the website know how much they can order before they will have to wait for backorders.

Matching Settings

Inventory Level Export Location Matching - Define which Shopify location to use for each GP location in the Inventory Level Export. A GP location can be matched to multiple Shopify locations, but multiple GP locations cannot be matched to the same Shopify location. Any unmatched Shopify locations will not be updated.



The dialog box is titled "Inventory Level Export Location Matching". It has a toolbar with a green plus icon and the text "Add", and a red minus icon and the text "Delete". Below the toolbar is a section labeled "Mappings". Inside this section is a table with two columns: "GP Location" and "Shopify Location". The table contains the following rows:

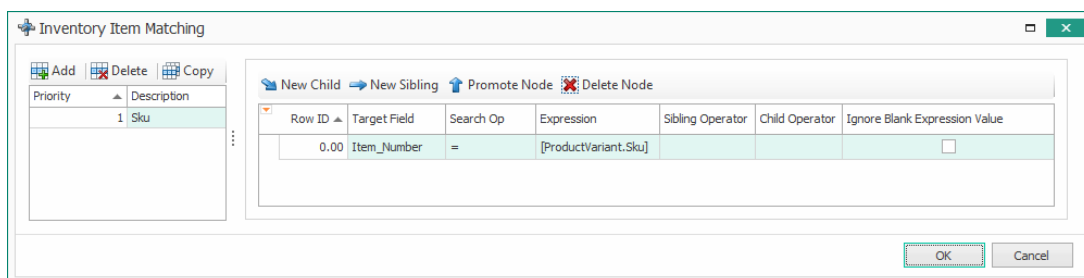
| GP Location | Shopify Location |
|-------------|-------------------------|
| WAREHOUSE | Main Fulfillment Center |
| NORTH | Shop location |

Below the table is a list box with a scroll bar. The list box contains the following items:

- Location
- Description
- I/O
- NORTH
- PAINT
- RETURNS
- SOUTH
- VENDOR
- WAREHOUSE

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

Inventory Item Matching - Define the criteria for which GP inventory levels to export to Shopify.



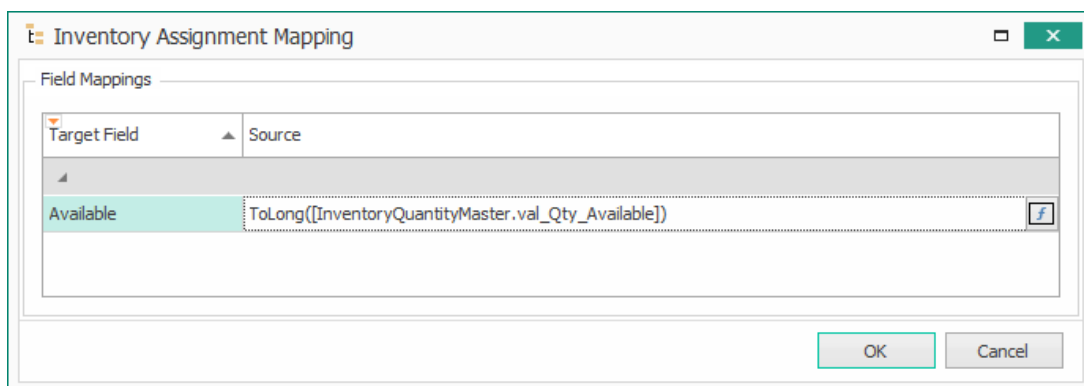
The dialog box is titled "Inventory Item Matching". It has a toolbar with a green plus icon and the text "Add", a red minus icon and the text "Delete", and a blue icon and the text "Copy". Below the toolbar is a section labeled "New Child", "New Sibling", "Promote Node", and "Delete Node". Below this section is a table with the following columns: "Row ID", "Target Field", "Search Op", "Expression", "Sibling Operator", "Child Operator", and "Ignore Blank Expression Value". The table contains the following row:

| Row ID | Target Field | Search Op | Expression | Sibling Operator | Child Operator | Ignore Blank Expression Value |
|--------|--------------|-----------|----------------------|------------------|----------------|-------------------------------|
| 0.00 | Item_Number | = | [ProductVariant.Sku] | | | <input type="checkbox"/> |

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

Assignment Settings

Inventory Assignment Mapping - Define the mappings to be used when exporting inventory quantities.



The dialog box is titled "Inventory Assignment Mapping". It has a section labeled "Field Mappings". Below this section is a table with the following columns: "Target Field" and "Source". The table contains the following row:

| Target Field | Source |
|--------------|---|
| Available | ToLong([InventoryQuantityMaster.val_Qty_Available]) |

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

Processing

The Inventory Level Export bulk loads inventory levels and products from Shopify. The Inventory Item Matching setting is used to match Shopify products to SalesPad items, and

the Inventory Level Export Location Matching setting is used to match Shopify locations to SalesPad warehouses. Then the Inventory Assignment Mapping setting is used to update the Shopify item availability based on its availability in its corresponding SalesPad item and warehouse.

Customer and Order Import

Overview

The Order Import retrieves all orders in Shopify that are ready to be imported. It matches customer and contact information to existing customers and contacts in SalesPad, or it creates customers and addresses as needed, before creating the sales orders. SalesPad orders and lines are created based on configurable mapping settings, then they are linked back to their corresponding Shopify orders, and finally their Shopify orders are flagged as imported.

General Settings

Customer Primary Address - When the Order Import creates a new customer, it will mark the selected address as the customer's primary address. Defaults to 'Bill To'.

Enable Order Import Trace - If enabled, customer and customer address matching information will be logged during order import. This setting should be enabled for troubleshooting purposes only. Defaults to 'False'.

Financial Status Filter - Specify one or more financial statuses which a Shopify order must have in order to be imported. Defaults to 'Paid'.

Forward Document After Import - If enabled, the imported order will be forwarded in workflow after being saved. Defaults to 'False'.

Fulfillment Status Filter - Specify one or more fulfillment statuses which a Shopify order must have in order to be imported. Defaults to 'Unfulfilled'.

Load Order Payment Terms - If set to 'True', the Order Import will load each order's payment terms. This requires the 'read_payment_terms' access scope to be selected for your SalesPad connector app in Shopify. NOTE: Only the first 250 payment schedules will be included. Defaults to 'False'.

Multiple Potential Customers Scenario - Review Queue - Queue that contains orders where a definitive customer match couldn't be found due to multiple possibilities being present. By default, the order will use the customer that has the earliest created date, then the order will be moved to the Workflow Queue designated by this setting to be reviewed.

Named Notes Tab for Shopify Order Comments - Specify which tab to import Shopify order comments to on the Sales Document. Defaults to 'Internal Notes'.

Number Of Days To Look Back - Specify the number of days to look back from today to import orders. For example, set to 30 to import orders only from the last 30 days. Set to zero to import orders from any time. Defaults to '0'.

Number Of Orders Per Page - Specify the number of orders to import for each page. (Maximum of 50). Defaults to '25'.

Payment Financial Status Filter - Specify one or more financial statuses for which a payment will be created after a successful import. Defaults to 'Paid'.

Processed Order Tag - After an order is imported to SalesPad, this tag will be written to the Shopify order to prevent subsequent imports. Defaults to 'EXPORTED_TO_SALESPAD'.

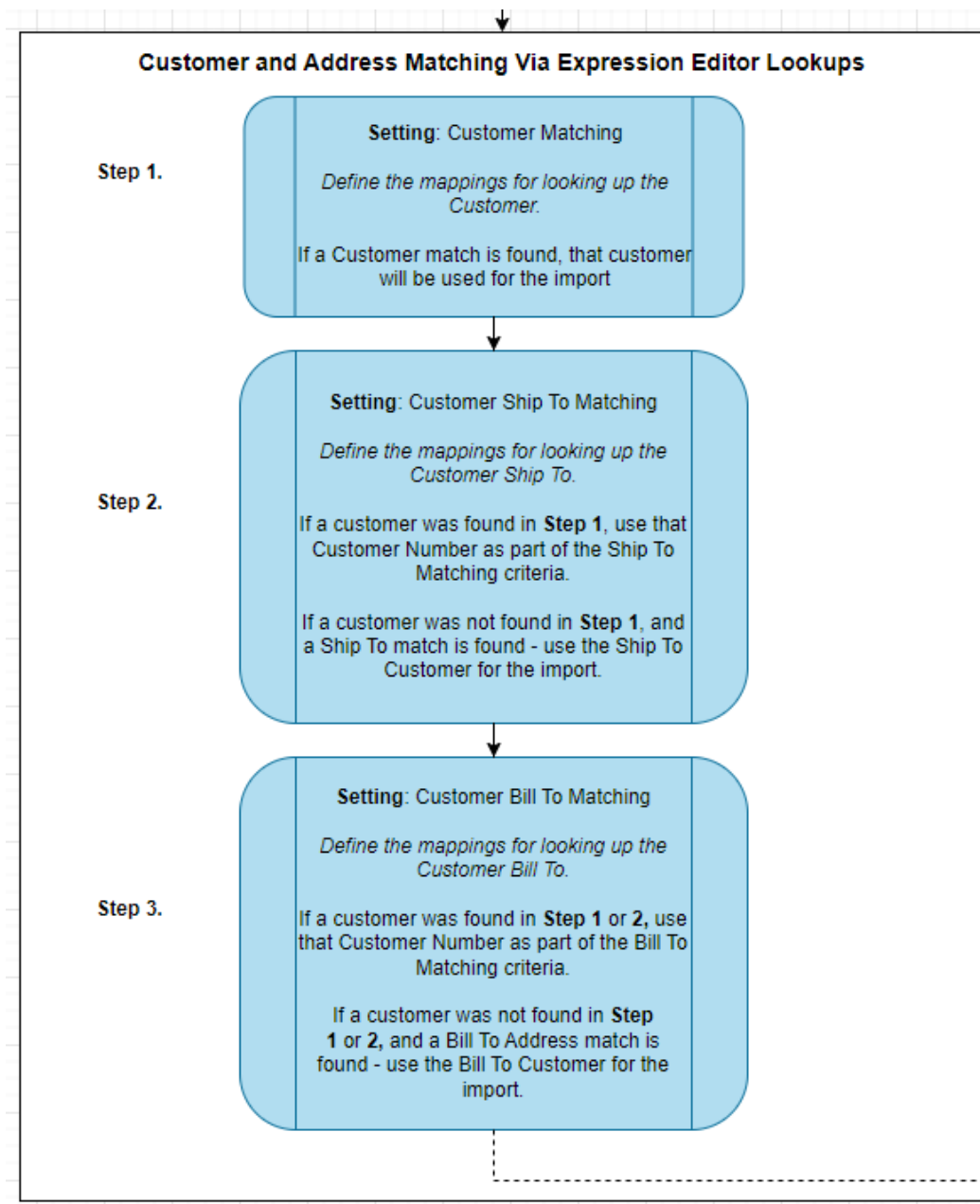
Roll Back Order Import Transaction On Error - When enabled, the transaction encompassing the order import will be rolled back when an error occurs. This prevents data from a partially completed import from being saved to the database. Defaults to 'True'.

Matching Settings

These settings use Expression Editors that allow creating custom matching criteria to determine how a Shopify entity should match to a SalesPad entity.

Each Matching setting will build one or more SQL queries to attempt to find a match in the SalesPad database. These queries are executed one at a time in order of Priority (lowest to highest). If an earlier priority query returns a result, that result will be returned to be used in the import, and the subsequent priorities will not execute.

The diagram below illustrates the sequence in which SalesPad attempts to match a SalesPad Customer, Ship To Address, and Bill To Address each time a Shopify Order is imported.



Customer Matching - Define the mappings for looking up the Customer.

This setting is used as the first attempt to match a SalesPad Customer to the Shopify Customer. If a customer is found in this step, that customer's Customer Number will be added to the search criteria when looking up the Ship To and Bill To Addresses.

The default settings attempt to match a SalesPad Customer based on the email of the Shopify Order. The conditions include a LIKE operator combined with an OR sibling operator. The LIKE operator indicates that the Email_To field must contain, but not exactly match, the expression. The OR sibling operator indicates that at least one of the conditions must match in order for a customer record to be considered a match. In the example below, the customer's Email_To field must match either the Order.Email field, or the Order.Email field with a ';' character appended. For example, if the Shopify customer's email is "aaronfitz@gmail.com", a SalesPad customer with

“aaronfitz@gmail.com;aaron@fitzelectrical.com” would be a match. The approximate SQL lookup executed for this condition would be:

“WHERE (customer.Email_To LIKE '%aaronfitz@gmail.com%') or customer.Email_To LIKE '%aaronfitz@gmail.com;%’

| Row ID | Target Field | Search Op | Expression | Sibling Operator | Child Operator | Ignore Blank Expression Value |
|--------|--------------|-----------|------------------------|------------------|----------------|-------------------------------|
| 0.00 | Email_To | LIKE | [Order.Email] | OR | | <input type="checkbox"/> |
| 1.00 | Email_To | LIKE | Concat([Order.Email... | OR | | <input type="checkbox"/> |

Note that this setting does not need to be populated, since the customer can also be matched indirectly via Customer Ship To Matching or Customer Bill To Matching settings. If Shopify Orders should be matched by the shipping address instead, then the Customer Matching setting can be cleared, and the Customer Ship To Matching and/or Customer Bill To Matching settings will be used to load the Ship To / Bill To and the corresponding customer.

Customer Ship To Matching - Define the mappings for looking up the Customer Ship To Address.

This setting determines how SalesPad will attempt to look up the Ship To Address for an incoming Shopify order. If a SalesPad Customer was matched via the Customer Matching setting, the Ship To Address must also belong to that customer. Otherwise, the search will consider address codes across all customers.

For example, if the customer 'AARONFIT0001' has already been matched, only address codes having a Customer_Num of 'AARONFIT0001' will be considered, even if they otherwise match the criteria in the Ship To Address Matching setting. If a customer has not yet been matched when a Shipping Address is found, the order will be imported under the customer for that shipping address.

The default settings attempt to match a SalesPad Shipping Address in three different steps.

Priority 1

Address: Attempt to find a match based on Address Line 1, City, State, and Zip. All four of these fields must be matched.

| Row ID | Target Field | Search Op | Expression | Sibling Operator | Child Operator | Ignore Blank Expression Value |
|--------|----------------|-----------|----------------------------------|------------------|----------------|-------------------------------|
| 1.00 | Address_Line_1 | = | [Order.ShippingAddress.Address1] | AND | | <input type="checkbox"/> |
| 3.00 | City | = | [Order.ShippingAddress.City] | AND | | <input type="checkbox"/> |
| 4.00 | State | = | [Order.ShippingAddress.Province] | AND | | <input type="checkbox"/> |
| 5.00 | Zip | = | [Order.ShippingAddress.Zip] | AND | | <input type="checkbox"/> |

Priority 2

Contact: Attempt to find a match based on the First and Last Name of the Shopify Customer or Shopify Shipping Address.

The screenshot shows the 'Customer Ship To Matching' dialog box with the 'Priority 2' tab selected. The left pane lists 'Address', 'Contact', and 'Primary Address'. The right pane shows a table with two rows of matching criteria.

| Row ID | Target Field | Search Op | Expression | Sibling O... | Child O... | Ignore Blank Expression Value |
|--------|----------------|-----------|---------------------------------------|--------------|------------|-------------------------------------|
| 0.00 | Contact_Person | = | Concat([Order.ShippingAddress.Firs... | OR | | <input checked="" type="checkbox"/> |
| 1.00 | Contact_Person | = | Concat([Order.Customer.FirstName... | OR | | <input checked="" type="checkbox"/> |

Priority 3

Primary Address: Attempt to find a match based on the Primary Address for the Customer. This assumes that the Customer was matched via the Customer Matching setting.

The screenshot shows the 'Customer Ship To Matching' dialog box with the 'Priority 3' tab selected. The left pane lists 'Address', 'Contact', and 'Primary Address'. The right pane shows a table with two rows of matching criteria.

| Row ID | Target Field | Search Op | Expression | Sibling O... | Child O... | Ignore Blank Expression Value |
|--------|--------------|-----------|----------------------------------|--------------|------------|-------------------------------|
| 0.00 | Customer_Num | = | [Customer.val_Customer_Num] | AND | | <input type="checkbox"/> |
| 1.00 | Address_Code | = | [Customer.val_Primary_Addr_Code] | AND | | <input type="checkbox"/> |

Customer Bill To Matching - Define the mappings for looking up the Customer Bill To Address.

This setting determines how SalesPad will attempt to look up the Bill To Address for an incoming Shopify order. If a SalesPad Customer was matched via the Customer Matching setting, the Bill To Address must also belong to that customer. Otherwise, the search will consider address codes across all customers.

For example, if the customer 'AARONFIT0001' has already been matched, only address codes having a Customer_Num of 'AARONFIT0001' will be considered, even if they otherwise match the criteria in the Bill To Address Matching setting. If a customer has not yet been matched when a Bill To Address is found, the order will be imported under the customer for that shipping address.

The default settings attempt to match a SalesPad Billing Address in three different steps.

Priority 1

Address: Attempt to find a match based on Address Line 1, City, State, and Zip. All four of these fields must be matched.

Customer Bill To Matching

Add Delete Copy

Priority Description

- Address
- Contact Person
- Primary Address

New Child New Sibling Promote Node Delete Node

| Row ID | Target Field | Search Op | Expression | Sibling O... | Child O... | Ignore Blank Expression Value |
|--------|----------------|-----------|---------------------------------|--------------|------------|-------------------------------|
| 2.00 | Address_Line_1 | = | [Order.BillingAddress.Address1] | AND | | <input type="checkbox"/> |
| 3.00 | City | = | [Order.BillingAddress.City] | AND | | <input type="checkbox"/> |
| 4.00 | State | = | [Order.BillingAddress.Province] | AND | | <input type="checkbox"/> |
| 5.00 | Zip | = | [Order.BillingAddress.Zip] | AND | | <input type="checkbox"/> |

OK Cancel

Priority 2

Contact Person: Attempt to find a match based on the First and Last Name of the Shopify Customer or Shopify Shipping Address.

Customer Bill To Matching

Add Delete Copy

Priority Description

- Address
- Contact Person
- Primary Address

New Child New Sibling Promote Node Delete Node

| Row ID | Target Field | Search Op | Expression | Sibling O... | Child O... | Ignore Blank Expression Value |
|--------|----------------|-----------|--|--------------|------------|-------------------------------------|
| 0.00 | Contact_Person | = | Concat([Order.BillingAddress.FirstN... | OR | | <input checked="" type="checkbox"/> |
| 1.00 | Contact_Person | = | Concat([Order.Customer.FirstName... | OR | | <input checked="" type="checkbox"/> |

OK Cancel

Priority 3

Primary Address: Attempt to find a match based on the Primary Address for the Customer. This assumes that the Customer was matched via the Customer Matching setting.

Customer Bill To Matching

Add Delete Copy

Priority Description

- Address
- Contact Person
- Primary Address

New Child New Sibling Promote Node Delete Node

| Row ID | Target Field | Search Op | Expression | Sibling O... | Child O... | Ignore Blank Expression Value |
|--------|--------------|-----------|----------------------------------|--------------|------------|-------------------------------|
| 0.00 | Customer_Num | = | [Customer.val_Customer_Num] | AND | | <input type="checkbox"/> |
| 1.00 | Address_Code | = | [Customer.val_Primary_Addr_Code] | AND | | <input type="checkbox"/> |

OK Cancel

Item Master Matching - Define the mappings for matching Shopify items to a GP Item Master.

Each Shopify Line Item will use this setting to find the corresponding SalesPad Item.

The default settings attempt to match a Shopify SKU directly to a SalesPad Item Number.

Item Master Matching

Add Delete Copy

Priority Description

- Sku

New Child New Sibling Promote Node Delete Node

| Row ID | Target Field | Search Op | Expression | Sibling O... | Child O... | Ignore Blank Expression Value |
|--------|--------------|-----------|----------------|--------------|------------|-------------------------------|
| 0.00 | Item_Number | = | [LineItem.SKU] | | | <input type="checkbox"/> |

OK Cancel

Assignment Settings

Assignment settings use Expression Editors to define how newly created Customers, Orders and Sales Lines will be populated when created during the order import process.

The target objects will be SalesPad Customers, Contacts, Sales Documents, and Sales Line Items. The source objects will be Shopify Customers, Contacts, Orders, and Line Items.

Each Mapping contains a grid of all the target fields, and an expression that will be used to populate each field. Required fields are grouped under the Suggested category. If a Suggested category field is not populated, an error may occur.

Customer Assignment Mapping - Define the mappings to be used when creating a new Customer.

If an existing SalesPad Customer was not found using the matching settings, then a new Customer will be created using the values in the Customer Assignment Mapping setting.

Customer Assignment Mapping


Field Mappings

| Target Field | Source |
|------------------|--|
| Suggested | |
| Currency_ID | |
| Customer_Name | IIF(!IsNullOrEmpty([Order.Customer.FirstName]) AND !IsNullOrEmpty([Order.... |
| Payment_Terms | |
| Sales_Person_ID | |
| Sales_Territory | |

OK Cancel

Customer Ship To Assignment Mapping - Define the mappings to be used when creating a new Customer Ship To Address.

If an existing SalesPad Customer Address was not found using the Customer Ship To Matching setting, then a new Customer Address will be created using the values in Customer Ship To Assignment Mapping setting.


Customer Ship To Assignment Mapping


Field Mappings

| Target Field | Source |
|------------------|--|
| Suggested | |
| Address_Line_1 | [Order.ShippingAddress.Address1] |
| Address_Line_2 | [Order.ShippingAddress.Address2] |
| Alt_Company_N... | [Order.ShippingAddress.Name] |
| City | [Order.ShippingAddress.City] |
| Contact_Person | Concat([Order.ShippingAddress.FirstName], ' ', [Order.ShippingAddress.LastN... |
| Country | [Order.ShippingAddress.Country] |
| Country_Code | [Order.ShippingAddress.CountryCode] |
| Created_On | Today() |
| Email | [Order.Customer.Email] |
| Sales_Person_ID | [Customer.val_Sales_Person_ID] |
| Sales_Territory | [Customer.val_Sales_Territory] |
| State | [Order.ShippingAddress.Province] |
| Zip | [Order.ShippingAddress.Zip] |
| Optional | |

OK
Cancel

Customer Bill To Assignment Mapping - Define the mappings to be used when creating a new Customer Bill To Address.

If an existing SalesPad Customer Address was not found using the Customer Bill To Matching setting, then a new Customer Address will be created using the values in the Customer Bill To Assignment Mapping setting.

 Customer Bill To Assignment Mapping

Field Mappings

| Target Field | Source |
|------------------|--|
| Suggested | |
| Address_Line_1 | [Order.BillingAddress.Address1] |
| Address_Line_2 | [Order.BillingAddress.Address2] |
| Alt_Company_Name | [Order.BillingAddress.Name] |
| City | [Order.BillingAddress.City] |
| Contact_Person | Concat([Order.Customer.FirstName], ' ', [Order.Customer.LastName]) |
| Country | [Order.BillingAddress.Country] |
| Country_Code | [Order.BillingAddress.CountryCode] |
| Created_On | Today() |
| Email | [Order.Customer.Email] |
| Sales_Person_ID | [Customer.val_Sales_Person_ID] |
| Sales_Territory | [Customer.val_Sales_Territory] |
| State | [Order.BillingAddress.Province] |
| Zip | [Order.BillingAddress.Zip] |
| Optional | |

OK

Cancel

Sales Document Assignment Mapping - Define the mappings to be used when creating a new Sales Document.

When the Shopify Order is imported, this setting will be used to populate the header level fields on the SalesPad Sales Document.

Sales Document Assignment Mapping

Field Mappings

| Target Field | Source |
|-------------------|--|
| Suggested | |
| Address_Line_1 | [Order.ShippingAddress.Address1] |
| Address_Line_2 | [Order.ShippingAddress.Address2] |
| Address_Validated | False |
| City | [Order.ShippingAddress.City] |
| Country | [Order.ShippingAddress.Country] |
| Country_Code | [Order.ShippingAddress.CountryCode] |
| Created_By | 'Shopify_Import' |
| Created_On | Today() |
| Currency_ID | [Customer.val_Currency_ID] |
| Customer_Name | IIF(!IsNullOrEmpty([Order.Customer.FirstName]) AND !IsNullOrEmpty([Order.... |
| Customer_PO_... | |
| Doc_Date | [Order.CreatedAt.DateTime] |
| Email | [Order.Email] |
| Sales_Batch | 'SHOIFY TEST' |
| Sales_Doc_ID | 'STDORD' |
| Sales_Doc_Type | 'ORDER' |
| Ship_To_Name | IIF(!IsNullOrEmpty([Order.Customer.FirstName]) AND !IsNullOrEmpty([Order.... |
| Source | 'OPEN' |
| State | [Order.ShippingAddress.Province] |
| Zip | [Order.ShippingAddress.Zip] |
| Optional | |

OK Cancel

Sales Line Assignment Mapping - Define the mappings to be used when creating a new Sales Line Item.

When the Shopify Order is imported, each line on that order will be created as a sales line on the SalesPad Sales Document. Each sales line's fields are set based on the Sales Line Assignment Mapping setting.

The Item Number is determined by the Item Master that is matched by the Item Master Matching setting. If a valid item was not found, then an expression like the one below can be used to import the Shopify Line Item as a Sales Line Item that is a non-inventory item. (Note that ZZ- is the default value in the Non-Inventory Prefix setting and should be updated to the local environment's value)

Sales Line Assignment Mapping

Field Mappings

| Target Field | Source |
|------------------|---|
| Suggested | |
| Item_Number | IIF([ItemMaster].[IsNew] = True, Concat('ZZ-', [LineItem.SKU]), [LineItem.SKU]) |
| Optional | |
| Is_Non_Inventory | IIF([ItemMaster].[IsNew] = True, True, False) |

☐ ☒ Target Field Starts with Is_Non Item_Nu

OK Cancel

A few other line item fields are set by the integration component by default, but they can be overridden by this setting: Unit_Price, Markdown_Amount, Tax_Amount, Funct_Tax_Amount.

Sales Document Payment Mapping - Define the mappings to be used when creating a Sales Document Payment.

Sales Document Payment Mapping

Field Mappings

| Target Field | Source |
|-------------------------|---|
| Suggested | |
| Amount_Paid | [Transaction.AmountSet.ShopMoney.Amount] |
| Cardholder_City | [SalesDocument.BillToAddr.val_City] |
| Cardholder_Country | [SalesDocument.BillToAddr.val_Country] |
| Cardholder_Country_Code | [SalesDocument.BillToAddr.val_Country_Code] |
| Cardholder_Name | [Transaction.PaymentDetails.CreditCardName] |
| Cardholder_State | [SalesDocument.BillToAddr.val_State] |
| Cardholder_Zip | [SalesDocument.BillToAddr.val_Zip] |
| Credit_Card_Name | 'CASH' |
| Currency_ID | [SalesDocument.val_Currency_ID] |
| Doc_Date | Today() |
| Payment_Type | 6s |
| Transaction_Amount | [Transaction.AmountSet.ShopMoney.Amount] |
| Transaction_Time | Now() |
| Transaction_Type | |
| Optional | |

OK Cancel

Scripts

Sales Document Pre Import Script - A C# Script that runs before a Sales Document is imported.

Parameters: System.ComponentModel.CancelEventArgs ce, Object sourceDoc,
SalesPad.Bus.SalesDocument sd

When importing a Shopify Order, this script runs before any assignments have been executed. This script can be used to cancel the import early by setting `ce.Cancel = true`. Note that Sales Document fields populated by this script may be overridden by assignment settings.

Customer And Address Matching Script - A C# Script that runs after the customer and addresses have been matched, and can be used to load a different customer, ship to address, or bill to address.

Parameters: System.ComponentModel.CancelEventArgs ce, Object sourceDoc,
SalesPad.Bus.Customer customer, SalesPad.Bus.CustomerAddr shipToAddr,
SalesPad.Bus.CustomerAddr billToAddr, bool multipleCustomersFound

This script will run after the customer and addresses have been matched. It can be used to do more complex assignments or additional validation, and it can cancel the import by setting `ce.Cancel = true`.

Sales Document Pre Save Script - A C# Script that runs just before a Sales Document is saved.

Parameters: System.ComponentModel.CancelEventArgs ce, Object sourceDoc,
SalesPad.Bus.SalesDocument sd

After this script runs, the new sales document is saved. This script is the last opportunity to adjust values, or cancel the import by setting `ce.Cancel = true`.

Sales Document Payment Script - A C# Script that can be used to override the default payment mappings. (Setting: Sales Document Payment Mapping)

Parameters: System.ComponentModel.CancelEventArgs ce, Object sourceDoc,
SalesPad.Bus.SalesDocument sd

This script can override the default payment mappings, and it can cancel the import by setting `ce.Cancel = true`.

Item Master Matching Script - A C# Script that can be used to load SalesPad.Bus.ItemMaster item.

Parameters: System.ComponentModel.CancelEventArgs ce, Object sourceDoc, Object
sourceLine, SalesPad.Bus.SalesDocument sd, SalesPad.Bus.ItemMaster item

This script can override the default matched Item Master, and it can cancel the import by setting `ce.Cancel = true`.

Processing

For each sales order in the website, the Order Import component attempts to match a SalesPad Customer to the Shopify Customer based on the Customer Ship To Matching,

Customer Bill To Matching, and Customer Matching settings. If no match is found, a new customer is created in SalesPad based on the Customer Assignment Mapping setting, and address codes for the new customer are determined by the Customer Ship To Assignment Mapping and Customer Bill To Assignment Mapping settings.

Once the customer and addresses are matched or created, the sales order is created based on the Sales Document Assignment Mapping, Item Master Matching, and Sales Line Assignment Mapping settings. Payment information can be imported for sales orders via the Sales Document Payment Mapping setting. A tag is added to each order in Shopify to indicate that importing was completed.

Customer and Customer Address Tracing

Depending on the complexity of the matching configuration, it may be difficult to tell how each customer and customer address is getting matched during order import. Order Import Tracing functionality will log every possible matching result to the spAAIntegrationTrace table in the database, regardless if matching was successful or not. Tracing may be enabled by enabling the Enable Order Import Trace setting under Order Import. Note that enabling this setting may cause database bloat, so it is intended only for troubleshooting purposes.

| <div> Refresh Print Grid Export Export to Template Reset Layout </div> | | | | | | |
|--|------------------------|-----------------|-----------------------------|--|----------------------|-------------|
| Automation Name | | Trace Name | External Object Key | | Business Object Name | Created i |
| Automation Name | Component Name | Trace Name | External Object Key | Mapping Info | Business Objec... | Search C |
| Magento 2 | Order Import Component | Customer | [IncrementId] = '000000121' | [Description] = 'Customer', [Priority] = '1' | Customer | ((Custom |
| Magento 2 | Order Import Component | Ship To Address | [IncrementId] = '000000121' | [Description] = 'Address', [Priority] = '1' | CustomerAddr | (([Address |
| Magento 2 | Order Import Component | Ship To Address | [IncrementId] = '000000121' | [Description] = 'Contact Person', [Priority] = '2' | CustomerAddr | (([[Contact |
| Magento 2 | Order Import Component | Bill To Address | [IncrementId] = '000000121' | [Description] = 'Address', [Priority] = '1' | CustomerAddr | (([Address |
| Magento 2 | Order Import Component | Bill To Address | [IncrementId] = '000000121' | [Description] = 'Contact Person', [Priority] = '2' | CustomerAddr | (([[Contact |

The following quick report can be used to query the spAAIntegrationTrace table in SalesPad:

```

<report name="AA Integration Trace" AutoLinks="true"
GroupFooterShowMode="Expanded" bestFitAll="true" AutoFit="false">
  <description />
  <query addWhere="true">SELECT *
FROM (
SELECT Automation_Name = ai.Instance_Name
,Automation_Description = ai.Instance_Description
,Component_Name = aic.Component_Name
,Trace_Name = ait.Trace_Name
,Group_ID = ait.Group_ID
,External_Object_Key = ait.External_Object_Key
,External_Object = ait.External_Object
,Mapping_Info = ait.Mapping_Info
,Business_Object_Name = ait.Business_Object_Name
,Search_Clause = ait.Search_Clause
,Results = ait.Results
,Created_On = ait.Created_On
,Created_By = ait.Created_By
FROM spAAIntegrationTrace AS ait WITH (NOLOCK)
LEFT JOIN spAAInstance AS ai WITH (NOLOCK) ON ai.AA_Instance_ID =
ait.AA_Instance_ID
LEFT JOIN spAAInstanceComponent AS aic WITH (NOLOCK) ON aic.AA_Instance_ID =
ait.AA_Instance_ID
AND aic.Component_ID = ait.AA_Component_ID
) AS a</query>
  <search name="Automation Name" column="Automation_Name" searchOp="LIKE"
Type="Text" />
  <search name="Trace Name" column="Trace_Name" searchOp="LIKE" Type="Text"
/>
  <search name="External Object Key" column="External_Object_Key" searchOp="LIKE"
Type="Text" />
  <search name="Business Object Name" column="Business_Object_Name"
searchOp="LIKE" Type="Text" />
  <search name="Created On" column="Created_On" searchOp="=" Type="DateTime"
/>
  <OnRunScript />
</report>

```

The embedded SQL query can be used directly from SSMS.

Order Update Export

Overview

The Order Update Export component sends tracking numbers and fulfillments back to Shopify for orders that were originally created by the Order Import component. It targets a specific workflow queue, and it forwards orders out of that queue once processing is complete. This component can also trigger Shopify to capture the order's authorization and/or to notify the customer that order updates have occurred.

General Settings

Capture Payment Upon Completing Fulfillment - If set to True, pending authorizations on Shopify orders will be captured by Shopify once the order is completely fulfilled. Defaults to 'False'.

Export Queue - Queue that contains orders ready to be exported to Shopify. This

component will ignore orders which do not have an External ID, but will assume that any orders which have an External ID belong to the linked Shopify store even if the order originated from a different automation instance.

Orders that were imported from Shopify will need to be directed into this queue so that they can export fulfillment and tracking information back to Shopify. They will wait to be processed, and afterward they will be forwarded in workflow.

Export Failure Queue - In the event of an unsuccessful export, the document will be placed into this queue.

If there is an exception during the order export process, the document will be moved to this queue and the error will be logged to the Automation Agent Action Center.

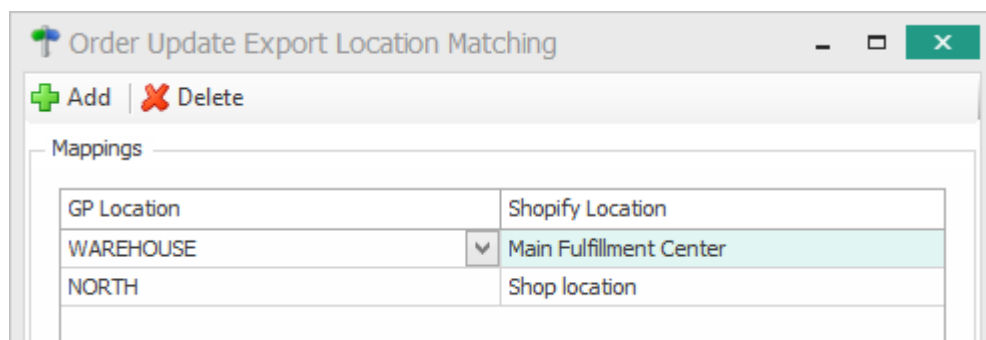
Notify Customers - If set to True, Shopify will email the order's customer when the Order Update Export creates or updates fulfillments. Defaults to 'True'.

Number Of Orders Per Export Page - Specify the number of orders in each page of the order export. Defaults to '50'.

Use this setting to minimize the number of orders that SalesPad attempts to load and process at the same time.

Matching Settings

Order Update Export Location Matching - Define which Shopify location to use for each GP location in the Order Update Export. A GP location can only be matched to one Shopify location, but multiple GP locations can be matched to the same Shopify location.



| GP Location | Shopify Location |
|-------------|-------------------------|
| WAREHOUSE | Main Fulfillment Center |
| NORTH | Shop location |

Sales Line Matching - Define the optional mappings for matching a Sales Line to a Shopify line. Can be used to override the default line matching.

By default, the Order Update Export will use the External ID column on sales line items to determine which Shopify line corresponds to it. The Sales Line Matching setting can override this behavior if needed, but it is recommended to leave the setting blank.

Assignment Settings

Captured Payment Mapping - Define the mappings to be used when creating a Sales Document Payment after capturing an authorization.

Processing

The Order Update Export processes all sales orders in the Export Queue setting. It uses the link that was created when each order was imported to call the Shopify API and update the corresponding Shopify order. For sales documents, the External ID designates the linked Shopify Order ID. For sales lines, the Sales Line Matching setting is used to find the corresponding Shopify line. The sales line also has an External ID that stores the ID of the corresponding Shopify line item; if the Sales Line Matching setting has been left blank, or did not find a match for a given line, then the External ID is used to find the Shopify line.

Fulfillments and tracking information are added for each Shopify sales line. If Notify Customers is enabled, then a flag is sent to trigger Shopify to notify the customer that this information has been updated. If Capture Payment Upon Completing Fulfillment is enabled, then a flag is sent to trigger Shopify to capture the pending payment.

The SalesPad order is forwarded in workflow if all processing was successful, and otherwise it is moved to the workflow queue in the Export Failure Queue setting.

Order Voided Export

Overview

The Order Voided Export component is used to automatically cancel orders in Shopify after they have been voided in SalesPad.

General Settings

Number Of Days To Look Back - Specify the number of days to look back from today to export voided orders. For example, set to 30 to export voided orders only from the last 30 days. Set to zero to export voided orders from any time. Defaults to '30'.

Number Of Voided Orders Per Export Page - Specify the number of voided orders in each page of the Voided Order Export. Defaults to '50'.

Matching Settings

Order Cancel Options Assignment Mapping - Define the mappings to be used when canceling an order.

Processing

The Order Voided Export loads SalesPad orders that have been voided in the timeframe defined in the Number Of Days To Look Back setting and are linked to a Shopify order. For each order, if it has not already been voided in Shopify, then the Order Cancel Options Assignment Mapping setting is used to cancel it in Shopify.

GraphQL and SalesPad Model Differences

Matching, mapping, and script settings often show a list of Shopify fields. These fields do not always use the same names as Shopify's GraphQL API, and they are sometimes located in different places within the model. This is because SalesPad uses a more static version of Shopify's model in order to reduce the number of breaking changes between SalesPad versions.

This section lists the field mappings for the entities which have the most notable differences between SalesPad's Shopify model and Shopify's GraphQL model.

Order

| SalesPad Field | Shopify GraphQL Field |
|-----------------------|---------------------------------|
| Id | legacyResourceId |
| AdminGraphQLAPIId | id |
| BillingAddress | billingAddress |
| BrowserIp | clientIp |
| BuyerAcceptsMarketing | customerAcceptsMarketing |
| CancelReason | cancelReason |
| CancelledAt | cancelledAt |
| ClosedAt | closedAt |
| Confirmed | confirmed |
| CreatedAt | createdAt |
| Currency | currencyCode |
| Customer | customer |
| CustomerLocale | customerLocale |
| DiscountApplications | discountApplications |
| Email | email |
| FinancialStatus | displayFinancialStatus |
| FulfillmentStatus | displayFulfillmentStatus |
| Phone | phone |
| Tags | tags |
| LineItems | lineItems |
| LocationId | retailLocation.legacyResourceId |
| Name | name |
| Note | note |

| | |
|-------------------------|--------------------------------------|
| NoteAttributes | customAttributes |
| OrderStatusUrl | statusPageUrl |
| PaymentGatewayNames | paymentGatewayNames |
| ProcessedAt | processedAt |
| ShippingAddress | shippingAddress |
| ShippingLine | shippingLine |
| SourceIdentifier | sourceIdentifier |
| SourceName | sourceName |
| SubtotalPrice | subtotalPriceSet.shopMoney.amount |
| TaxLines | taxLines |
| TaxesIncluded | taxesIncluded |
| Test | test |
| TotalDiscounts | totalDiscountsSet.shopMoney.amount |
| TotalLineItemsPrice | subtotalPriceSet.shopMoney.amount |
| TotalTipReceived | totalTipReceivedSet.shopMoney.amount |
| TotalPrice | totalPriceSet.shopMoney.amount |
| TotalTax | totalTaxSet |
| TotalWeight | totalWeight |
| UpdatedAt | updatedAt |
| Transactions | transactions |
| CurrentTotalDutiesSet | currentTotalDutiesSet |
| OriginalTotalDutiesSet | originalTotalDutiesSet |
| PresentmentCurrency | presentmentCurrencyCode |
| TotalLineItemsPriceSet | subtotalPriceSet |
| TotalDiscountsSet | totalDiscountsSet |
| CurrentShippingPriceSet | currentShippingPriceSet |

| | |
|--------------------------------|---|
| TotalShippingPriceSet | totalShippingPriceSet |
| SubtotalPriceSet | subtotalPriceSet |
| TotalPriceSet | totalPriceSet |
| TotalOutstanding | totalOutstandingSet.shopMoney.amount |
| TotalTaxSet | totalTaxSet |
| EstimatedTaxes | estimatedTaxes |
| CurrentSubtotalPriceSet | currentSubtotalPriceSet |
| CurrentTotalDiscounts | currentTotalDiscountsSet.shopMoney.amount |
| CurrentTotalDiscountsSet | currentTotalDiscountsSet |
| CurrentTotalPrice | currentTotalPriceSet.shopMoney.amount |
| CurrentTotalPriceSet | currentTotalPriceSet |
| CurrentTotalTax | currentTotalTaxSet.shopMoney.amount |
| CurrentTotalTaxSet | currentTotalTaxSet |
| PaymentTerms | paymentTerms |
| CurrentTotalAdditionalFeesSet | currentTotalAdditionalFeesSet |
| OriginalTotalAdditionalFeesSet | originalTotalAdditionalFeesSet |
| PoNumber | poNumber |
| TaxExempt | taxExempt |
| TotalTipReceivedSet | totalTipReceivedSet |
| TotalOutstandingSet | totalOutstandingSet |

Line Item

| SalesPad Field | Shopify GraphQL Field |
|---------------------|---------------------------------------|
| Id | id (number portion only) |
| AdminGraphQLAPIId | id |
| FulfillableQuantity | unfulfilledQuantity |
| Price | originalUnitPriceSet.shopMoney.amount |
| ProductId | product.legacyResourceId |

| | |
|------------------------|-----------------------------------|
| CurrentQuantity | currentQuantity |
| Quantity | quantity |
| RequiresShipping | requiresShipping |
| SKU | sku |
| Title | title |
| VariantId | variant.legacyResourceId |
| VariantTitle | variantTitle |
| Name | name |
| Vendor | vendor |
| GiftCard | isGiftCard |
| Taxable | taxable |
| TaxLines | taxLines |
| TotalDiscount | totalDiscountSet.shopMoney.amount |
| TotalDiscountSet | totalDiscountSet |
| DiscountAllocations | discountAllocations |
| ProductExists | 'True' if product is not null |
| PriceSet | originalUnitPriceSet |
| Duties | duties |
| Transaction | |
| SalesPad Field | Shopify GraphQL Field |
| Id | id (number portion only) |
| AdminGraphQLAPIId | id |
| Amount | amountSet.shopMoney.amount |
| Authorization | authorizationCode |
| AuthorizationExpiresAt | authorizationExpiresAt |
| CreatedAt | createdAt |
| Gateway | gateway |

| | |
|-------------------|--|
| Kind | kind |
| Receipt | receiptJson |
| ErrorCode | errorCode |
| Status | status |
| Test | test |
| Currency | amount.presentmentMoney.currencyCode |
| ParentId | parentTransaction.id (number portion only) |
| ProcessedAt | processedAt |
| MaximumRefundable | maximumRefundableV2.amount |
| PaymentId | paymentId |
| TotalUnsettledSet | totalUnsettledSet |
| AmountSet | amountSet |

Product

SalesPad's Shopify model and Shopify's GraphQL model are currently identical for products. This includes SalesPad's Id field including the "gid://shopify/Product/" portion of the Id.

Product Variant

| SalesPad Field | Shopify GraphQL Field |
|----------------|--|
| Id | id |
| Barcode | barcode |
| CompareAtPrice | compareAtPrice |
| Price | price |
| TaxCode | taxCode |
| Taxable | taxable |
| Sku | inventoryItem.sku |
| Tracked | inventoryItem.tracked |
| Weight | inventoryItem.measurement.weight.value |
| WeightUnit | inventoryItem.measurement.weight.unit |

Attachments

- [Shopify Integration Documentation - With Technical Notes.pdf \(1.40 MB\)](#)