

V210 Retail Edition (Shopify Connector)

Tushar Pandita

Senior Business Analyst

Timing and Agenda

November 4, 2024 -10:00-12:00 PM PT

Day 1

Lesson 1.1: Initial Configuration

Lesson 1.2: Manual Synchronization

November 5, 2024 -10:00-12:00 PM PT

Day 2

Lesson 2.1: Synchronization of Customers and Customer Locations

Lesson 3.1: Synchronization of Stock Items and Non-Stock Items

Lesson 3.2: Synchronization of Product Images



Timing and Agenda

November 6, 2024 -10:00-12:00 PM PT

Day 3

Lesson 3.3: Synchronization of Product Availability

Lesson 4.1: Import of Credit Card Payments

Lesson 4.2: Import of Taxes

November 7, 2024 -10:00-12:00 PM PT

Day 4

Lesson 4.3: Selling and Accepting Gift Cards

Lesson 4.4: Import of an Order with Discounts

Lesson 5.1: Automating the Synchronization of Entities

Lesson 5.2: Monitoring Day-to-Day Commerce Operations





Company Structure

The SweetLife Fruits & Jams company is a midsize company located in New York City. The company consists of the following branches:

- SweetLife Head Office and Wholesale Center: This branch of the company consists of a jam factory and a large warehouse where the company stores fruit (purchased from wholesale vendors) and the jam it produces. Warehouse workers perform warehouse operations by using barcode scanners or mobile devices with barcode scanning support.
- SweetLife Store: This branch has a retail shop with a small warehouse to which the goods to be sold are distributed from the company's main warehouse. This branch is also planning on selling goods via a website created on an e-commerce platform to accept orders online. The e-commerce integration project is underway.
- SweetLife Service and Equipment Sales Center: This branch is a service center with a small warehouse where juicers are stored. This branch assembles, sells, installs, and services juicers, in addition to training customers' employees to operate juicers.



Operational Activity

The company has been operating starting in the 01-2023 financial period. In November 2023, the company started using Acumatica ERP as an ERP and CRM system and migrated all data of the main office and retail store to Acumatica ERP. The equipment center has begun its operations in 01-2024 in response to the company's growth.

The base currency of the company and its subsidiaries is the US dollar (USD). All amounts in documents and reports are expressed in US dollars unless otherwise indicated.



SweetLife Company Sales and Services

Each SweetLife company's branch has its own business processes, as follows:

- SweetLife Head Office and Wholesale Center: In this branch, jams and fruit are sold to wholesale customers, such as restaurants and cafes. The company also conducts home canning training at the customer's location and webinars on the company's website.
- SweetLife Store: In the store, retail customers purchase fresh fruit, berries, and jams, or pick up the goods they have ordered on the website. Some of the goods listed in the website catalog are not stored in the retail warehouse, such as tropical fruits (which are purchased on demand) and tea (which is drop-shipped from a third-party vendor).
- SweetLife Service and Equipment Sales Center: This branch assembles juicers, sells juicers, provides training on equipment use, and offers equipment installation, including site review and maintenance services. The branch performs short-term service provision.

The company has local and international customers. The ordered items are delivered by drivers using the company's own vehicle. Customers can pay for orders by using various payment methods (cash, checks, or credit cards).





Lesson 1.1: Initial Configuration

Learning Objectives

In this section, you will learn what general steps are involved in establishing a connection between Acumatica ERP and the Shopify store and in performing the initial configuration of these systems.



Lesson 1.1: Initial Configuration

The following general steps are performed to connect the Acumatica ERP instance to the Shopify store

Step	Details
1. Set up a Shopify store	Sign up for a Shopify site and perform the store setup.
2. Obtain the Shopify API keys	Obtaining of URL of the Shopify store followed by /manage API credentials (API path, client ID, and access token).
3. Prepare the Acumatica ERP instance	Specify the numbering sequence and payment methods that will be used for the Shopify store, activate features Shopify Connector, Retail Commerce on the Enable/Disable Features (CS100000) form.
4. Establish the connection to the Shopify store	Configuration of Connection Settings on the Shopify Stores (BC201010) form using API credentials.
5. Perform the initial configuration of the store connection	Basic required configuration of the Shopify Store (Entity Settings, Customer Settings, Inventory Settings, Order Settings, Payment Settings, Shipping Settings).
6. Configure the entities enabled for synchronization	Setting of the mapping of custom fields for synchronization and synchronization filtering settings on the Entities (BC202000) form.



Initial Configuration: To Set Up a Shopify Store

Story

The SweetLife company is planning on opening an online store built on the Shopify platform. The store's warehouse, from which the goods sold online will be shipped, is based in New York. The company maintains the prices of its products in U.S. dollars and delivers products across New York by using the company's own vehicles.

As an implementation consultant helping SweetLife to implement the integration between Shopify and Acumatica ERP, you want to set up a new store and perform the minimum required configuration of the Shopify store that will be sufficient to proceed with the configuration of the integration.

Initial Configuration: To Set Up a Shopify Store

Process overview

Steps	Details
1. Signing up for a Shopify trial account	Register for free Shopify trial account using a valid email address. Specify settings as the store name, password, default store address with country, zipcode, city, and phone number.
2. Setting the Store Time Zone	On the Store details settings page, which opens, in the Time zone and units of measurement section, set Time zone to the store time zone. E.g. (GMT-05:00) Eastern Time (US & Canada).
3. Setting Up the Store Currency	In the Store details settings page, review the currency settings in the Store currency section.
4. Reviewing the Default Shipping Options	On the Shipping and delivery page, in the Shipping section, click General shipping rates. On the General profile page, which opens, review that the settings that have been defined by default during the creation of the store.
5. Reviewing the Storefront Settings	In the left menu, click the Online Store sales channel. On the Themes page, that opens, check if there are themes installed. If not, install the default theme. Then from the upper right, click View your store to review the storefront with the installed theme.

Initial Configuration: To Establish the Store Connection with a Custom App

Story

Suppose that the SweetLife Fruits & Jams company wants to sell jam in its online store, which is deployed on the Shopify platform. SweetLife is already using Acumatica ERP and now needs to integrate its instance with a new Shopify store. As SweetLife's implementation consultant, you need to create and install a custom app in your Shopify store and establish the connection between Acumatica ERP and the Shopify store using the app's credentials.

Initial Configuration: To Configure the Store Connection

Story

Suppose that the SweetLife Fruits & Jams company wants to sell jam in its online store deployed on the Shopify platform. SweetLife has already connected Acumatica ERP and its Shopify store. As SweetLife's implementation consultant, you need to perform the minimum configuration required for synchronization of data between Acumatica ERP and the Shopify store.

Initial Configuration: To Establish and Configure the Store Connection

Configuration overview for U100 dataset:

- On the Enable/Disable Features (CS100000) form, the Retail Commerce and Shopify Connector features have been enabled.
- On the Customer Classes (AR201000) form, the ECCUSTOMER customer class has been defined.
- On the Numbering Sequences (CS201010) form, the ECCUSTOMER numbering sequence has been defined,
- On the Customers (AR303000) form, the ECOMGUEST customer record has been created.
- On the Non-Stock Items (IN202000) form, the REFUNDAMT non-stock item has been defined.
- On the Item Sales Categories (IN204060) form, the Other sales category has been created.
- On the Order Types (SO201000) form, the EO eCommerce Order has been defined based on the SO order template.
- On the Ship via Codes (CS207500) form, the SWEETSHIP ship via code has been created.



Initial Configuration: To Establish and Configure the Store Connection

- On the Cash Accounts (CA202000) form, the 10250ST cash account has been configured for the RETAIL branch and the USD currency.
- On the Ship via Codes (CS207500) form, the SWEETSHIP ship via code has been created.
- On the Payment Methods (CA204000) form, the ONLINE payment method has been set up to be used with the 10250ST cash account.

Initial Configuration: To Establish and Configure the Store Connection

Process overview

Steps	Details
Activating the Needed Entities	Set entities as active on the Entity Settings tab of the Shopify Stores (BC201010) form.
Specifying the Customer Settings	Set up Customer class, numbering sequence and guest customer on the Customer Settings tab of the Shopify Stores (BC201010) form.
Specifying the Order Settings	Set up configuration for Sales orders sync (branch, Order Type, Refund Amount Item) on the Order Settings tab of the Shopify Stores (BC201010) form.
Specifying the Payment Settings	Map the MANUAL Shopify store payment method on the ONLINE ERP payment method on the Payment Settings tab of the Shopify Stores (BC201010) form.
Specifying the Shipping Settings	Map the Standard and Economy store shipping methods of the Domestic store shipping zone on the Shipping Settings tab of the Shopify Stores (BC201010) form.

Lesson 1.2: Manual Synchronization

Learning Objectives

In this lesson, you will learn how to manually synchronize data between Acumatica ERP and a Shopify store.

Export and Import Filtering

Field Mapping

Data Synchronization

Preparation of Out-of-Sync Data for Synchronization

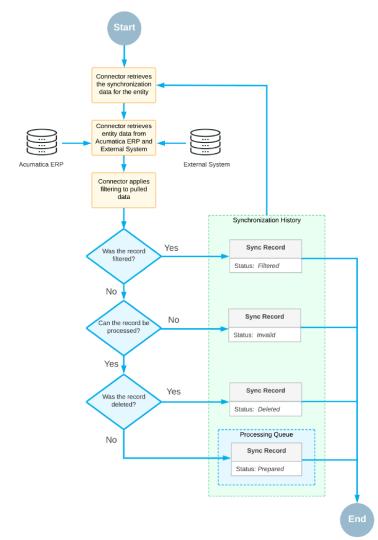
Modes of the data preparation process:

- **Full:** All records that have been created or modified during the specified date range are prepared, regardless of whether they have been processed previously or not. If no range is specified, all records are prepared.
- **Incremental:** Only the records that have been modified since the date of the last successful data preparation are prepared.
- Incremental by Date: Only records that have been modified during the specified date range and that have not yet been processed are prepared.

The process can be started:

- Manually, on the Prepare Data (BC501000) form.
- By an automation schedule.
- By Push notifications If real-time synchronization is enabled for an entity on the Entities (BC202000) form.

Preparing data for synchronization





Processing of Out-of-Sync Data

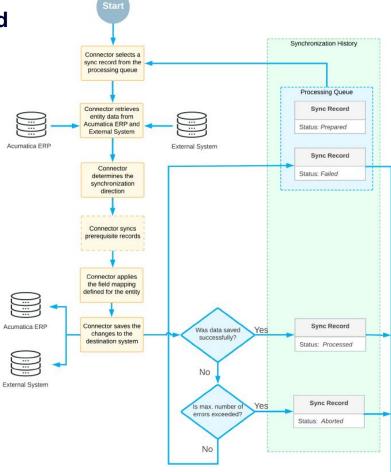
During the data processing stage, the system processes the synchronization records in the processing queue according to the synchronization settings defined for the corresponding entity on the Entities (BC202000) form or on the Entity Settings tab of the Shopify Stores (BC201010) form, and the synchronized data is saved in Acumatica ERP, in the Shopify store, or in both systems.

The process can be started:

- Manually, on the Process Data (BC501500) form.
- By an automation schedule.
- As a result of the real-time synchronization process- If real-time synchronization is enabled for an entity on the Entities (BC202000) form.



Processing prepared data





Data Synchronization: Manual Synchronization

Manual synchronization might be useful when you need to synchronize data during the initial configuration or when data has not been synchronized for some reason and manual troubleshooting is needed.

- To prepare data select the store, entity and Prepare mode on the Prepare Data (BC501000) form then click Prepare.
- To process data select the store, entity and synchronization records on the Process Data (BC501500) form then click Process.

Data Synchronization: To Perform the First Synchronization

Story

Suppose that you are an implementation consultant helping the SweetLife Fruits & Jams company to set up an online store. You have completed the minimum initial configuration of the integration with Shopify and now want to explore how synchronization works. You will configure synchronization for and then synchronize a subset of stock items that are maintained in Acumatica ERP (stock items of the Jam item class) with the Shopify store. You will then place a test order for one of the synchronized products and explore how the online order is processed in the Shopify store and in Acumatica ERP.

Data Synchronization: To Perform the First Synchronization

Process overview

Steps	Details
Review the stock items that need to be exported	On the Stock Items (IN202500) form of Acumatica ERP, review the stock items that need to be exported to the Shopify store.
2. Configure the filtering options for the Stock Item entity	On the Entities (BC202000) form, configure the filtering options for the Stock Item entity to include in the synchronization only the stock items of the Jam item class.
3. Start the data preparation process for the Stock Item entity	On the Prepare Data (BC501000) form, start the data preparation process for the Stock Item entity to prepare out-of-sync data for export.
4. Review the result of the data preparation process	On the Sync History (BC301000) form, review the result of the data preparation process.
5. Start data processing for the Stock Item entity	On the Process Data (BC501500) form, start data processing for the Stock Item entity to save the synchronized product data in the Shopify store.
6. Review the results of data processing.	On the Sync History form, review the results of data processing.
7. Review data synchronization results	In the Shopify online store, review the products that have been exported to Acumatica ERP.

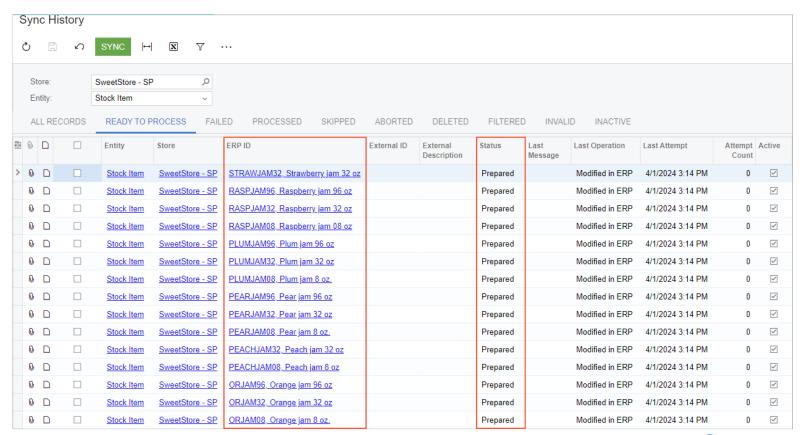


Data Synchronization: To Perform the First Synchronization

Process overview (continue)

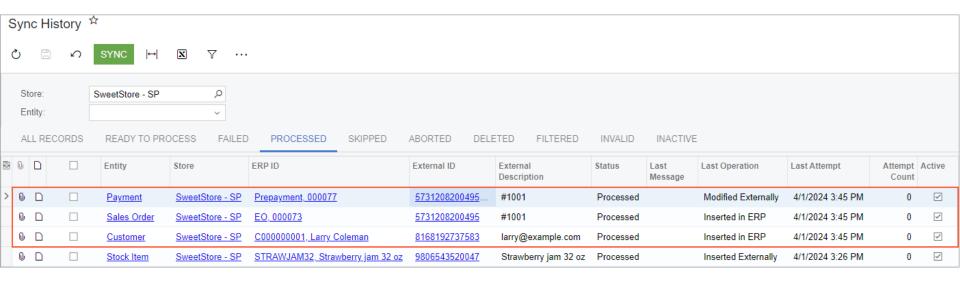
Steps	Details
8. Place an order in the Shopify Store	By using the control panel of the Shopify store, place an order for one of the products that have been exported from Acumatica ERP.
9. Start the data preparation process for the Sales Order entity	On the Prepare Data form of Acumatica ERP, start the data preparation process for the Sales Order entity to prepare out-of-sync order data for import; on the Process Data form, synchronize the prepared sales order data.
10. Review the results of data sync	On the Sync History form, review the results of data synchronization.
11. Review the details of the imported sales order	On the Sales Orders (SO301000) form, review the details of the imported sales order.
12. Create a shipment for the imported order	On the Sales Orders form, create a shipment for the imported order, and on the Shipments (SO302000) form, confirm the shipment.
13. Start the data preparation process for the Shipment entity	On the Prepare Data form, start the data preparation process for the Shipment entity; on the Process Data form, synchronize the prepared shipment data.
14. Review the updated order details and the shipment	In the control panel of the BigCommerce store, review the updated order details and the shipment exported from Acumatica ERP.

Data prepared for processing

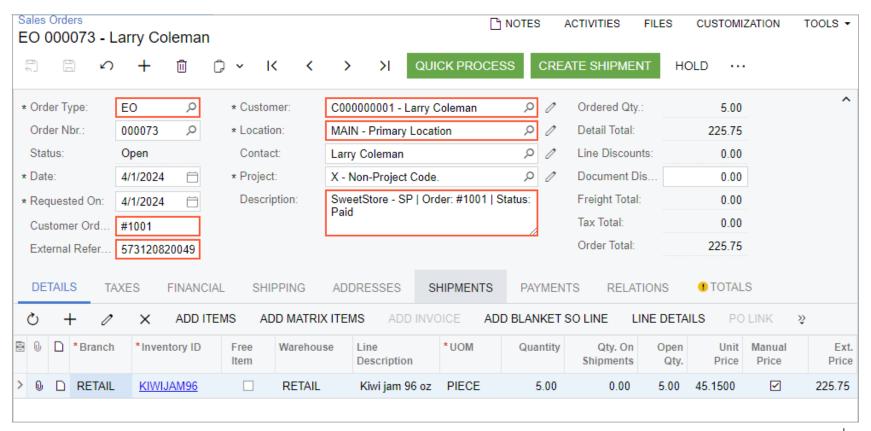




The sales order, customer, and payment records imported from the Shopify store



The sales order imported from the Shopify store





Day 1 Recap

We learned how to do the following:

- Set up a BigCommerce store
- Obtain the BigCommerce API keys
- Establish the connection to the BigCommerce store
- Perform the initial configuration of entities
- Export and Import Filtering
- Field Mapping
- Perform the first synchronization manually

Lessons

Lesson 2.1: Synchronization of Customers and Customer Locations

This lesson explains how you synchronize Regular customers and customer locations and Business Customers, their contacts and locations between Acumatica ERP and a Shopify store.

Lesson 3.1: Synchronization of Stock Items and Non-Stock Items

This lesson explains how you export stock and non-stock items from Acumatica ERP to a Shopify store.

Lesson 3.2: Synchronization of Product Images

This lesson explains how you export product images from Acumatica ERP to a Shopify store.





Part 2: Synchronization of Customers and Customer Locations

Lesson 2.1: Synchronization of Customers and Customer Locations

Learning Objectives

In this lesson, you will learn how to do the following:

- Set up the synchronization of individual and business customers and customer locations so that they can be both exported to the Shopify store and imported from the Shopify store to Acumatica ERP
- Synchronize individual customers that have multiple locations
- Synchronize business customers

Lesson 2.1: Synchronization of Customers and Customer Locations

Learning Objectives

In this chapter, you will learn how to do the following:

- •Set up the synchronization of individual and business customers and customer locations so that they can be both exported to the Shopify store and imported from the Shopify store to Acumatica ERP.
- •Synchronize individual customers that have multiple locations.
- Synchronize business customers.

Lesson 2.1: Synchronization of Customers and Customer Locations

Applicable Scenarios

- The import of customers can be configured if it is necessary to sync changes to customer information made in the Shopify store to Acumatica ERP.
- The synchronization of customers is a prerequisite for the synchronization of orders.
- The export of customers from Acumatica ERP to the Shopify store can be configured if records of customers are maintained in Acumatica ERP and details of these customers should be up-todate in the BigCommerce store.

Customer Synchronization: Default Settings

Default Customer Settings

When you activate the Customer or Company entity on the Entity Settings tab of the Shopify Stores (BC201010) form, you need to also fill in the following boxes on the Customer Settings tab:

- Customer Class: The customer class that is assigned to new customers imported to Acumatica ERP from the Shopify store and thus used to provide their default settings.
- Customer Numbering Template: The template that is used to provide the identifiers of new customers imported to Acumatica ERP from the Shopify store.
- Customer Numbering Sequence: The numbering sequence that the system uses to automatically generate identifiers for customers imported from the Shopify store.

Default Customer Location Settings

In Acumatica ERP, you can save more than one location for a customer account if the Business Account Locations feature is enabled on the Enable/Disable Features (CS100000) form.

When you activate the Customer and Customer Location entities or when you activate the Company entity on the Entity Settings tab of the Shopify Stores (BC201010) form, you need to also fill in the following boxes:

- Location Numbering Template: The template that is used to provide the identifiers of new customer locations imported to Acumatica ERP from the Shopify store.
- Location Numbering Sequence: The numbering sequence that the system uses to automatically generate identifiers for customer locations imported from the Shopify store.

Synchronization of Customers with Customer Locations

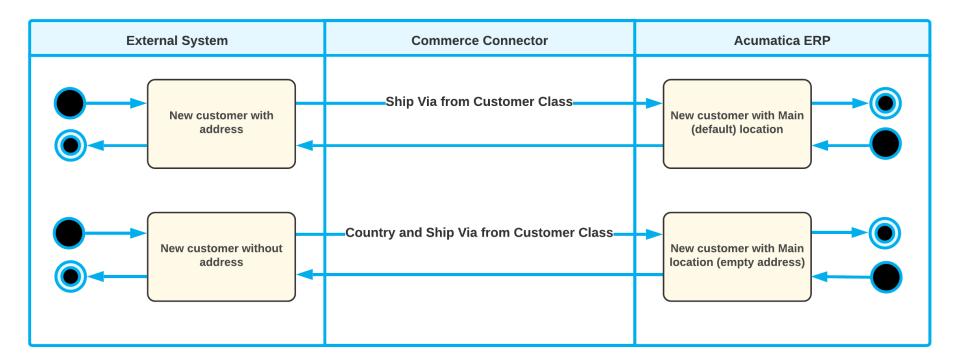
Prerequisites for synchronization of customer and customer locations between Acumatica ERP and the BigCommerce store:

- Business Account Locations feature is enabled on the Enable/Disable Features (CS100000) form
- Customer Location Entity is active on the Entities tab of the BigCommerce Stores (BC201000) form
- Fill in the following boxes on the Customer Settings tab
 - Location Numbering Sequence
 - Location Numbering Template

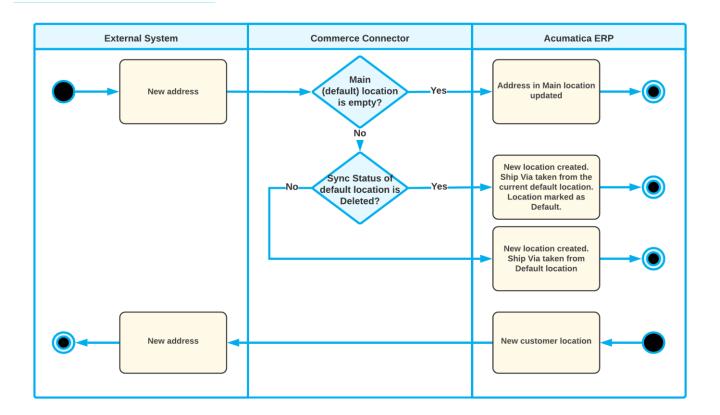
Notes:

 When the Customer entity is synchronized between the BigCommerce store and Acumatica ERP, customer location (address) data is copied from one system to the other along with the customer data.

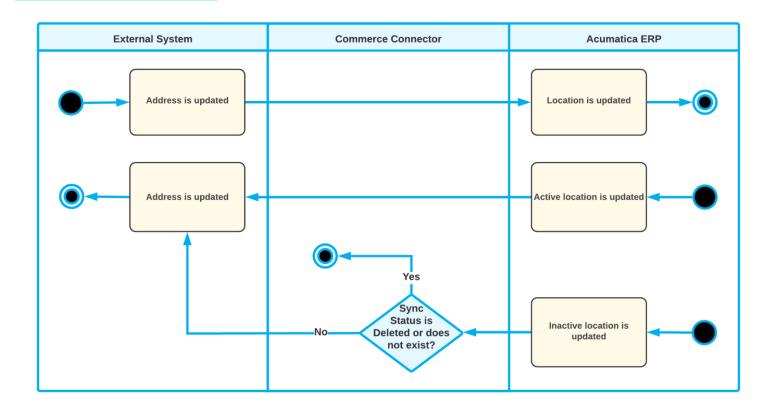
Synchronization of customers created without an address



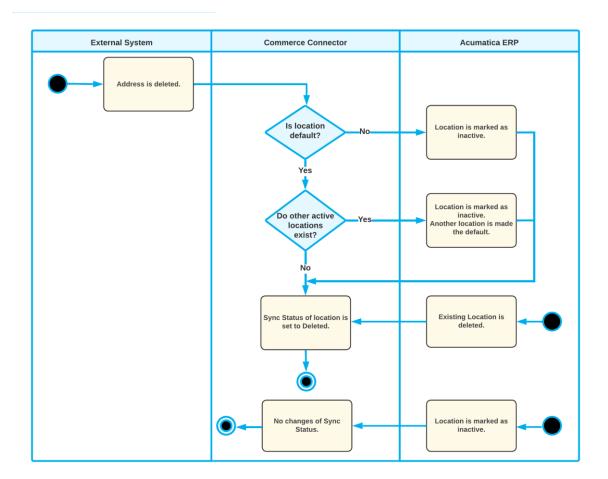
Synchronization of a new customer address



Synchronization of an updated customer address



Synchronization of a deleted customer address



Customer Synchronization: To Perform Bidirectional Synchronization of Individual Customers

Story

Suppose that the SweetLife Fruits & Jams company has multiple business customers from the United States and Canada in the system. The company management wants customer records for US customers to be exported from Acumatica ERP to the Shopify store. At the same time, new customers that place orders in the Shopify store should be imported to Acumatica ERP.

Because an email address is a key field for a customer in Shopify, customers that do not have it specified in Acumatica ERP will not be saved in the Shopify store during the export.

Acting as an implementation consultant helping SweetLife to set up the synchronization between Acumatica ERP and the Shopify store, you need to configure the bidirectional synchronization of customers, and configure the filtering conditions to export only records for US customers that have an email specified.

SweetLife's Shopify subscription does not include business-to-business features, so individual and business customers should be synchronized together.



Synchronizing Customers: To Perform Bidirectional Synchronization

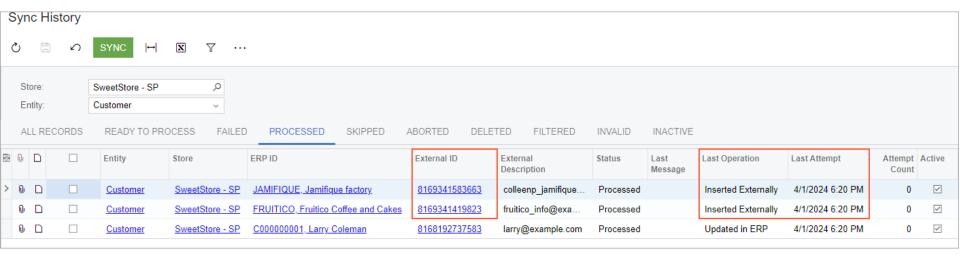
Process overview

Steps	Details
1. Configuring the Filtering Condition	On the Entities (BC202000) form, configure the filtering condition for the export of customers from Acumatica ERP to the Shopify store.
2. Preparing the Customer Data for Synchronization	On the Prepare Data (BC501000) form, start the data preparation process for the Customer entity to prepare out-of-sync data for export.
3. Processing the Prepared Customer Data	On the Process Data (BC501500) form, start data processing for the Customer entity to save the synchronized customer data in the Shopify store.
4. Reviewing the Synchronization Status	On the Sync History (BC301000) form, review the synchronization status of the processed synchronization records.
5. Viewing Exported Customer Records	In the Shopify store, review the customers that have been imported from Acumatica ERP.

Note: On the Entity Settings tab of the Shopify Stores (BC201010) form Customer entity, should be active with Sync Direction set to Bidirectional and Primary System set to External System.



Processed synchronization records for the Customer entity



Customer Synchronization: To Synchronize Customers with Multiple Locations

Story

Suppose that SweetLife Fruits & Jams works with individual customers and small businesses that order items to be delivered to multiple locations. The company keeps track of customer addresses in the Shopify store and wants these addresses to be in sync with customer locations in Acumatica ERP.

SweetLife's Shopify subscription does not include business-to-business features, so individual and business customers should be synchronized together.

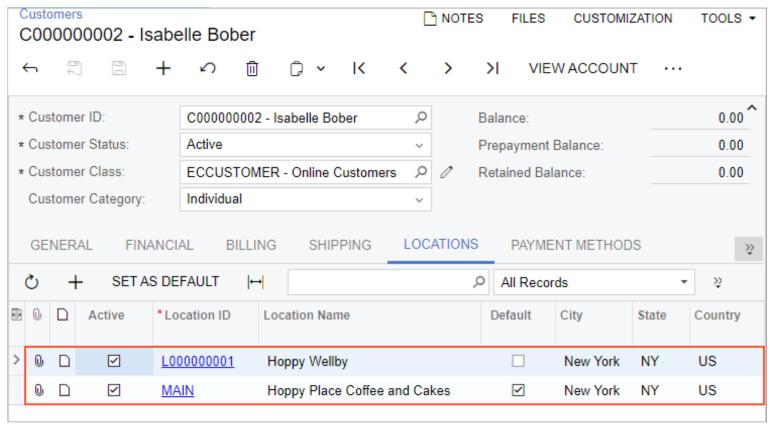
Acting as an implementation consultant helping SweetLife to set up the integration of Acumatica ERP with the Shopify store, you need to configure the synchronization of customers along with their locations between the two systems. You will then test the import of customers with multiple locations, then update location details, and test the export of the updated data.

Synchronizing Customers: To Perform Bidirectional Synchronization

Process overview

Steps	Details
Configuring the Synchronization Settings of the Customer and Customer Location Entities	On the Shopify Stores (BC201010) form, update the settings of the Customer and Customer Locations entities.
2. Creating a Customer in the Shopify Store and add two Addresses for the Customer	In the control panel of the Shopify store, create a new customer with two addresses.
3. Preparing the Customer and Customer Location Data	On the Prepare Data (BC501000) form, prepare the customer and customer address data for synchronization.
4. Processing the Prepared Customer and Customer Location Data	On the Process Data (BC501500) form, process the customer and customer address data prepared for synchronization.
5. Review the Imported Customer and Customer Locations	On the Customers (AR303000) form, review the imported customer data.
6. Update the customer location in ERP and process the update to Shopify.	Update the contact and address details of the MAIN customer location for Customer. Resync the customer record and view the customer in Shopify.

Customer locations imported from the store



Customer Synchronization: Business Customers

The synchronization of business customers is available if both the Shopify Connector feature and the

Business-to-Business Entities feature are enabled on the Enable/Disable Features (CS100000) form.

Import of Business Customers:

During the import of a company from a Shopify store to Acumatica ERP, the system does the following:

- Creates a customer for the company on the Customers (AR303000) form
- For each location that has been defined for the company in the Shopify store, creates a customer location on the Customer Locations (AR303020) form.
- For each customer associated with the company in the Shopify store, creates a contact on the Contacts (CR302000) form

Customer Synchronization: Business Customers

Export of Business Customers:

Prerequisites:

- The synchronization direction for the Company entity for export is Export or Bidirectional.
- Customers are exported only if the Customer Category box contains Organization on the Customers (AR303000) form.

During the export of a business customer, the system does the following in the Shopify store:

- Creates a company.
- Creates a company location for each customer location created for the business customer on the Customer Locations (AR303020) form.
- Creates a customer for each contact created for the business customer on the Contacts (CR302000) form and associates it with the company.





Part 3: Synchronization of Products

Lesson 3.1: Synchronization of Stock Items and Non-Stock Items

Learning Objectives

In this lesson, you will learn how to export stock and non-stock items to the Shopify store.

Applicable Scenarios

- When the external system is configured and needs to transfer stock and non-stock items that have already been defined in Acumatica ERP.
- If an item that was synchronized previously was updated in Acumatica ERP, and the changes should be reflected in the product settings in the external system.

Synchronization of Stock Items and Non-Stock Items

Configuration of Product Synchronization

- Activate the Stock Item and Non-Stock Item entity.
- Configure the default visibility and purchasability settings for items exported to the BigCommerce store.
- Determine which items should be exported and define the visibility and purchasability settings for individual items.

Note: During the export, the system updates the availability and visibility settings of each item exported to Shopify based on the settings specified for the item on the eCommerce tab of the Non-Stock Items or Stock Items form and for the store on the Inventory Settings tab of the Shopify Stores (BC201010) form.

Product Synchronization: Default Store Settings

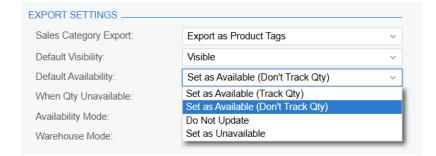
Default Product Availability Settings – Inventory Setting tab of the Shopify Stores (BC201010) form

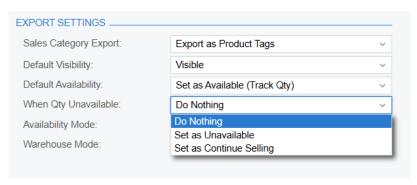
Default Availability:

- Set as Available (Track Qty.)
- Set as Available (Don't Track Qty.)
- Do Not Update
- Set as Unavailable

When Qty. Unavailable:

- Do Nothing
- Set as Unavailable
- Set as Continue Selling





Product Synchronization: Default Store Settings

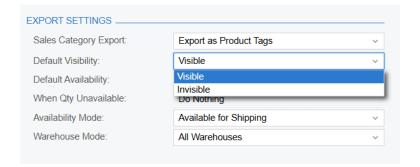
Default Visibility Settings - Inventory Settings tab of the BigCommerce Stores (BC201000) form

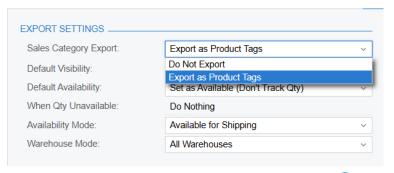
Default Visibility:

- Visible
- Invisible

Sales Category Export:

- Do Not Export
- Export as Product Tags





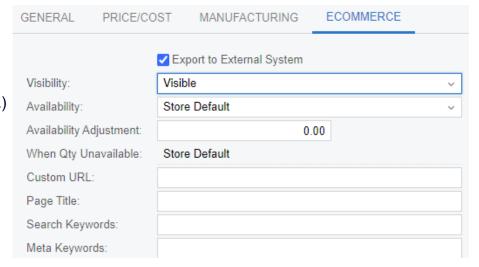


Product Synchronization: Settings of Individual Items

Export to External System

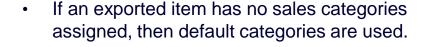
Visibility: Availability:

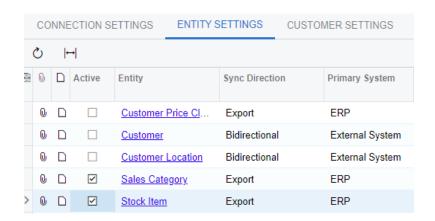
- Store Default
 Store Default
- Visible
 Set as Available (Track Qty.)
- Featured
 Set as Available (Don't Track Qty.)
- Invisible
 Set as Pre-Order
 - Set as Unavailable

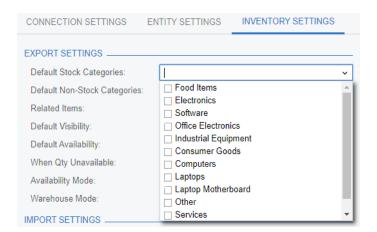


Product Synchronization: Sales Categories

 Only exported categories are assigned for exported item in the BigCommerce store







Product Synchronization: To Sync Items with Attributes

Story

Suppose that the SweetLife Fruits & Jams wants to keep information about the product type for each of its jams (that is, stock items of the Jam item class) in Acumatica ERP. Further suppose that after the jam stock items are exported to the Shopify store, the product type should be assigned to them in the store.

Acting as an implementation consultant helping SweetLife to set up the integration of Acumatica ERP with the Shopify store, you need to define an attribute for the product type in Acumatica ERP, assign it to the items, map it to the product type in Shopify, and then export the stock items along with their product type to the Shopify store.

Product Synchronization: To Synchronize Stock Items with Attributes

In the U100 dataset, the following tasks have been performed for the purposes of this activity:

- On the Item Classes (IN201000) form, the JAM item class has been defined.
- On the Stock Items (IN202500) form, the CHERJAM96 stock item of the JAM item class has been created.

Product Synchronization: To Synchronize Stock Items with Attributes

Process overview

Steps	Details
1. Creating an Attribute	On the Attributes (CS205000) form, create an attribute for the Product Type.
2. Adding the Attribute to the Needed Item Class	On the Item Classes (IN201000) form, add the attribute to the JAM item class.
3. Assigning a Value to the Added Attribute	On the Stock Items (IN202000) form, assign a value to the created attribute for a particular non-stock item.
4. Mapping the Attribute to a Field in the Shopify Store	On the Entities (BC202000) form, map the attribute field with a product field in the BigCommerce store.
5. Preparing Product Data for Synchronization	On the Prepare Data (BC501000) form, prepare the product data for synchronization.
6. Process Product Data for Synchronization	On the Process Data (BC501500) form, process the product data prepared for synchronization

Lesson 3.2: Synchronization of Product Images

Learning Objectives

In this lesson, you will learn how to export product images from Acumatica ERP to the Shopify store.

Product Synchronization: To Sync Product Images

Story

Suppose that the SweetLife Fruits & Jams company wants to store some images of the products it sells in the online store in an external storage. Some of the images, however, are attached to items in the Acumatica ERP instance.

Acting as an implementation consultant helping SweetLife to set up the integration of Acumatica ERP with the Shopify store, you want to test how images stored in Acumatica ERP are exported to the Shopify store.

Applicable Scenarios

- You maintain product information in Acumatica ERP, export this information to the Shopify store, and use Acumatica ERP to store images of exported stock and non-stock items.
- You maintain product information in Acumatica ERP, export this information to the Shopify store, store images of exported stock and non-stock items in an external storage but keep links to the image files in Acumatica ERP.



Export of Product Images

Images can be saved in Acumatica ERP for stock and non-stock items in the following two ways:

- As attachments to an item: On the Attributes tab of the Stock Items (IN202500) and Non-Stock Items (IN202000) forms.
- As links to an external storage: In the Media URLs table on the eCommerce tab of the Stock Items and Non-Stock Items forms.

To Export images for a product, the prerequisite is to synchronize the product to Shopify. If the link has been added to the Ecommerce tab, the image link must be publicly accessible

- Images that have been attached to an item on the Stock Items or Non-Stock Items form are exported to the Shopify store during the synchronization of the **Product Image** entity.
- Images specified as links in the Media URLs table on the eCommerce tab are exported together with the Stock Items or Non-Stock Items entity.

Product Synchronization: To Export Product Images

Story

Suppose that the SweetLife Fruits & Jams company wants to store some images of the products it sells in the online store in an external storage. Some of the images, however, are attached to items in the Acumatica ERP instance.

Acting as an implementation consultant helping SweetLife to set up the integration of Acumatica ERP with the

Shopify store, you want to test how images stored in Acumatica ERP are exported to the Shopify store.

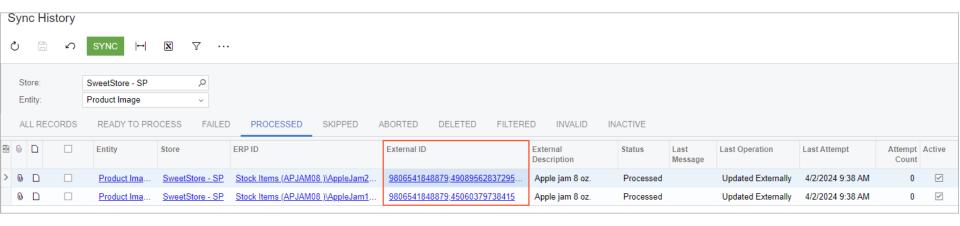


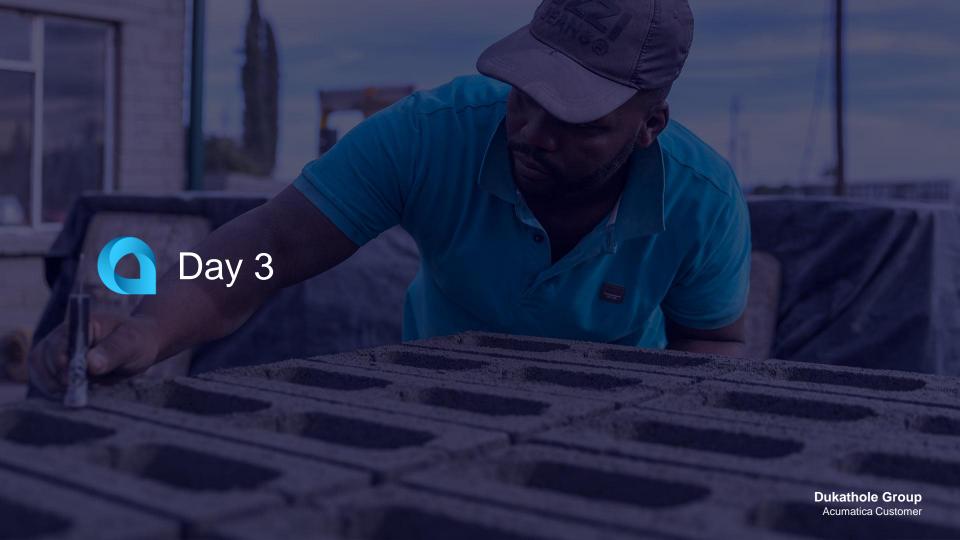
Product Synchronization: To Export Product Images

Process overview

Steps	Details
1. Add images to the Stock Items.	On the Stock Items (IN202500) form, add images to the APJAM08 stock item.
2. Export the Stock Items entity.	On the Prepare Data (BC501000) form, prepare the stock item data for sync and onthe Process Data (BC501500) form, process the stock item data prepared for synchronization.
3. Review the Stock Item in Shopify	In the admin area of the Shopify store, review the exported stock item.
4. Activate the Needed Entity	On the Shopify Stores (BC201010) form, activate the Product Image entity
5. Preparing the Image Data for Synchronization	On the Prepare Data (BC501000) form, prepare the product image data for synchronization
6. Processing the Prepared Image Data	On the Process Data (BC501500) form, process the product image data for synchronization.
7. Reviewing the Synchronized Images	In the control panel of the Shopify store, review the exported product.

Synchronization records for the product images





Days 1&2 Recap

We learned how to do the following:

- Set up a Shopify store
- Obtain the Shopify API keys
- Connection to the Shopify store
- Perform the initial configuration of entities
- Export and Import Filtering
- Field Mapping
- Perform the first synchronization manually

- Set up the synchronization of customers and customer locations (addresses)
- Export stock and non-stock items
- Export product images



Lessons

Lesson 3.3: Synchronization of Product Availability

This lesson explains how you export product availability information from Acumatica ERP to a Shopify store.

Lesson 4.1: Import of Credit Card Payments

This lesson explains how you import orders and payments from a Shopify store to Acumatica ERP.

Lesson 4.2: Import of Taxes

This lesson explains how you import orders with taxes from a Shopify store to Acumatica ERP.

Lesson 3.3: Synchronization of Product Availability

Learning Objectives

In this lesson, you will learn how to do the following:

- Define how the available quantities of items exported to the Shopify store should be calculated
- Set up quantity tracking for stock items exported to the Shopify store
- Synchronize the available quantities of exported stock items for which quantity tracking is turned on

Applicable Scenarios

You track available quantities of stock items exported to the Shopify store if you want to make these items available for purchase by shoppers through the storefront only if there is a sufficient quantity in stock.

Product Availability Synchronization

Prerequisites for synchronization of Product Availability Synchronization between Acumatica ERP and the BigCommerce store

- Activate the Product Availability entity.
- Specify the quantity calculation settings for the store on the Inventory Settings tab of the Shopify Stores form.
- Determine the stock items for which available quantities should be exported.



Tracking Available Quantities of Exported Stock Items

Exported stock item is available for purchase:

Availability	Product Management Page	Inventory section
Set as Available (Track Qty.)	Online Store sales Channel shows	Track quantity checked

Action for stock items whose quantities become zero:

When Qty. Unavailable	Product Management Page	Inventory section
Set as Unavailable	Online Store sales channel disappears	Track Quantity Unchecked
Set as Pre- Order/Continue Selling	Online Store sales channel disappears	Continue selling when out of stock check box checked
Do Nothing	Not Updated	Not updated

Synchronization of Availability Settings

With the synchronization of the Stock Item entity availability (purchasability) gets updated according to:

- Availability settings for any stock items.
- When Qty.Unavailable setting for stock items with tracked quantities and 0 stock.

Synchronization of Available Quantities

Available quantities of stock items:

- Exported when Product Availability entity is active.
- Affects only the stock items that have Availability set to Set as Available (Track Qty.)
- Depends on Warehouse Mode and Availability Mode settings specified.
- Exported in item`s sales unit of measure.



Product Availability: Calculation of Available Quantities

Selection of the Availability Mode and the Warehouse Mode

Type of quantity to export is defied by the **Availability Mode**:

- On Hand:
- Available for Shipping:
- Available

Warehouses to export quantity are defined by the **Warehouse Mode**:

- All Warehouses
- Specific Warehouses

Note: Adjustment of Available Quantities can be set in the Availability Adjustment box on the eCommerce tab of the Stock Items (IN202500) form.

Product Availability: To Export Product Availability Data

Story

Suppose that the SweetLife Fruits & Jams company sells several kinds of jams in its online store. By default, items should be available for purchase in the store only if they are in stock. Some of the jams, however, need to be available for purchase all the time, regardless of their stock levels. The jams can be ordered in the online store as follows:

- Banana jams (BANJAM96 and BANJAM08) should be available for purchase only if there is enough stock.
- Plum jams (PLUMJAM96 and PLUMJAM08) should be available for purchase when there is sufficient quantity in stock. If there is no quantity in stock, the availability to purchase the item should be determined by the settings specified for the item on the product management page in the BigCommerce store.

Acting as an implementation consultant helping SweetLife to set up the synchronization of Acumatica ERP with the Shopify store,

Product Availability: To Export Product Availability Data

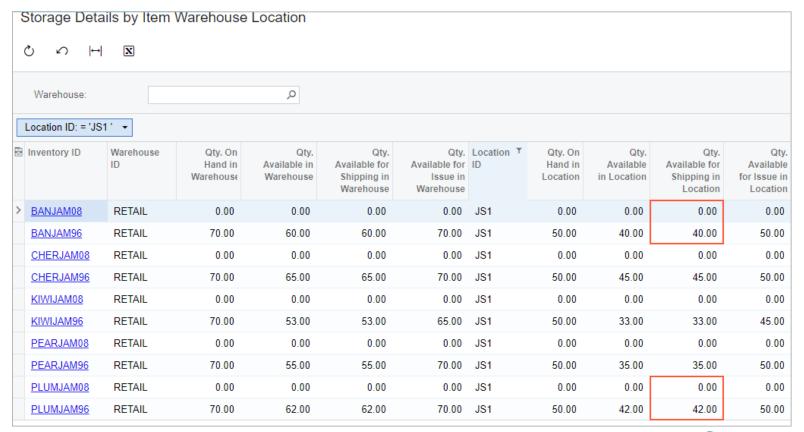
Configuration overview for U100 dataset:

- On the Enable/Disable Features (CS100000) form, the following features have been enabled:
 - Multiple Warehouses
 - Multiple Warehouse Locations
- On the Warehouses (IN204000) form, the RETAIL warehouse and the JS1 warehouse location have been configured.
- On the Stock Items (IN202500) form, the needed stock items have been created in the system and assigned the availability settings.

Figure: Stock items configuration

Stock Item	Availability	When Qty. Unavailable
BANJAM96	Store Default	Store Default
BANJAM08	Store Default	Store Default
PLUMJAM96	Set as Available (Track Qty.)	Do Nothing
PLUMJAM08	Set as Available (Track Qty.)	Do Nothing

Quantities available for shipping at the JS1 location of the RETAIL warehouse





Product Availability: To Export Product Availability Data

Process overview

Steps	Details
1. Updating the Default Availability Settings	On the Shopify Stores (BC201010) form, update the default availability settings for the BigCommerce store.
2. Reviewing the Available Quantities of Items	On the Storage Details by Item Warehouse Location (IN408055) form, review the quantities of stock items available in the RETAIL warehouse.
3. Synchronizing the Product Availability Data	On the Prepare Data (BC501000) form, prepare the product availability data for synchronization, and on the Process Data (BC501500) form, process the prepared product availability data.
4. Reviewing the Synchronized Data	In the Shopify store, review the availability settings and quantities of the exported



Part 4: Synchronization of Orders

Lesson 4.1: Import of Credit Card Payments

Learning Objectives

In this lesson, you will learn how to do the following:

- Configure the synchronization of orders between Acumatica ERP and the Shopify store
- Configure the synchronization of payments between Acumatica ERP and the Shopify store
- Import sales orders with payments from the Shopify store to Acumatica ERP
- Configure card payment processing in Acumatica ERP and Shopify

Minimal Configuration of Order Synchronization

To start importing sales orders from the Shopify store:

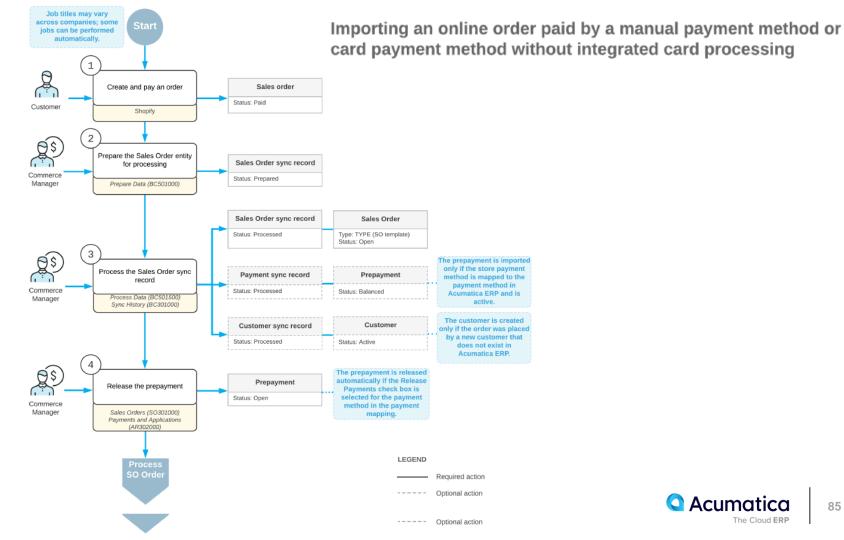
- Activate the Sales Order and Customer entities
- Specify the minimal required settings for:
 - Customer
 - Stock Item and Non-Stock Item
 - Sales Order
 - Branch
 - Order Type for Import
 - Refund Amount Item
- Map each shipping options (Optional)



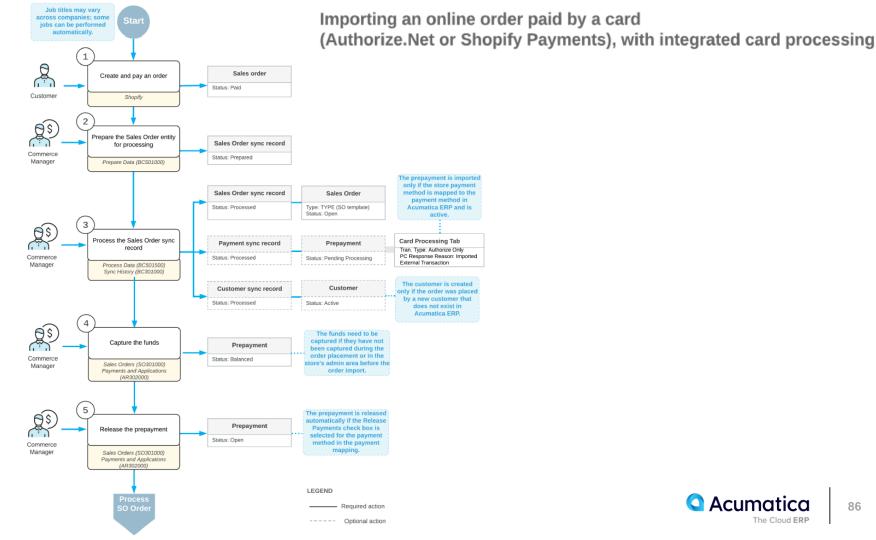
Synchronization of Sales Orders and Payments

When Orders are imported from a Shopify store during the synchronization of the Sales Order entity the connector:

- 1. Creates a sales order on the Sales Orders (SO301000) form
 - Archived orders are filtered
- 2. Searches for products by SKU (that is, stock and non-stock items) included in the sales order
 - Products must be synchronized or created in Acumatica ERP
- 3. Searches for a customer that placed the order, and inserts it in the sales order.
 - New customer gets created or existing one can be updated
- 4. Creates a document of the Prepayment type on the Payments and Applications (AR302000) form
 - Store payment method must be mapped. If the mapping is inactive, system assigns payment record as Filtered.











Order Synchronization: Card Payments

The ability to use card-processing features, such as authorization, capture, voiding, and refunding card transactions, is available if the *Integrated Card Processing feature is enabled* on the Enable/Disable Features (CS100000) form.

Configuration of Shopify Payment Method for Integrated Card Processing

- 1. Set up Shopify Payments in your Shopify store.
- 2. Select the **Enable Integrated CC Processing** check box on the **Accounts Receivable Preferences** (AR101000) form.
- 3. Configure the Shopify processing center on the **Processing Centers** (CA205000) form.
- 4. Configure a card-based payment method on the **Payment Methods** (CA204000) form.
- 5. Map the card-based payment method with the store payment method on the **Shopify Stores** (BC201010) form.



Mapping of Card-Based Payment Methods

Payment method mapping should be done in the table on the Payment Settings tab of the Shopify Stores (BC201010) form.

For mapping the Shopify payments mapping should be set for the following:

- ERP Payment Method
- Cash Account
- Proc. Center ID:
- Active check box
- Release Payments and Refunds check box
- Process Refunds check box



Additional Mapping for Shopify Payments fees

- Create the entry types on the Entry Types (CA203000) form for importing Shopify Payments fees.
- Add the entry type to the cash account specified in the mapping for the Shopify Payments payment method.
- Map Shopify Payments fees to the entry types in the Shopify Fees table on the Shopify Stores form.



Order Synchronization: To Configure and Import Shopify Payments

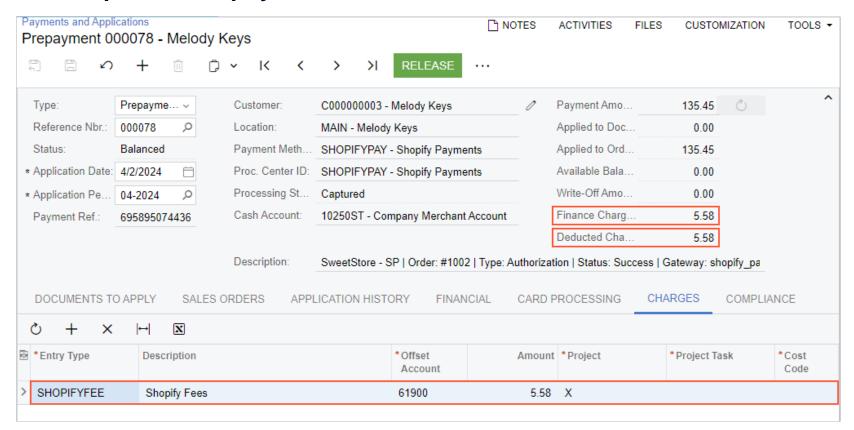
Story

Suppose that the SweetLife Fruits & Jams company wants to accept card payments in the Shopify store. The company sells its products in the United States, where Shopify Payments is supported.

Further suppose that the company management wants to import the Shopify Payments fees to Acumatica ERP for tracking purposes.

Acting as an implementation consultant helping SweetLife to set up the synchronization of data between Acumatica ERP and the Shopify store, you need to configure Shopify Payments as a card payment provider in the Shopify store, configure the card payment processing in Acumatica ERP, and then configure the import of card payments from the Shopify store to Acumatica ERP.

The imported Shopify fees



Lesson 4.2: Import of Taxes

Learning Objectives

In this lesson, you will learn how to set up tax synchronization if you collect tax on products you sell in the Shopify store.

Applicable Scenarios

You set up tax synchronization during the configuration of the connection between Acumatica ERP and the Shopify store to make sure that taxes collected on online orders are reflected in an imported order and then correctly recalculated when a shipment and an invoice are created for the order.

Import of Taxes: Manual Tax Setup

To import manual taxes from the connector, specify the tax synchronization settings on the Order Settings tab of the Shopify Stores (BC201010) form as follows:

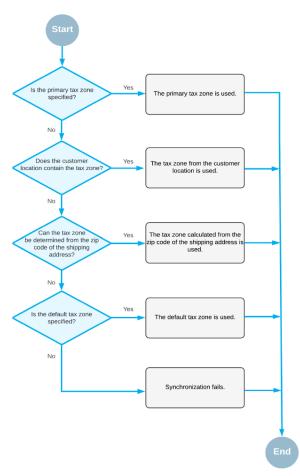
- Tax Synchronization: Selected
- Default Tax Zone: The tax zone that the system will assign to the order if no tax zone has been identified during the order import.
- Use as Primary Tax Zone: Cleared



Import of Taxes: Manual Tax Setup

- If you are not using external tax provider, you would need to set up manual taxes in Shopify and Acumatica ERP.
- The manual tax configuration should match in the Shopify store and in Acumatica ERP, otherwise issues might occur during the synchronization of entities.
- Tax categories and taxes in Acumatica ERP should be configured in the same way as tax rates and exemptions in Shopify.
- If you use different names for a tax or an exemption in both systems, you should map tax IDs in the substitution list specified in the Tax List box and tax categories in the substitution list specified in the Tax Category List box on the Order Settings tab of the Shopify Stores (BC201010) form.

Determining the tax zone for tax calculation





Import of Taxes: External Tax Provider

- Configure automatic tax calculation in the Shopify store.
- Configure the integration of Acumatica ERP with the external tax provider by using the same account as was used in the previous step.

Tax Synchronization Settings:

In the Order section, in the Order Type for Import box, select an order type for which the calculation of taxes has been disabled on the Order Types (SO201000) form.

In the Taxes section, specify the following settings:

- Select the Tax Synchronization check box.
- In the Default Tax Zone, select the tax zone that you have configured for the external tax provider.
- Select the Use as Primary Tax Zone check box.

In the Substitution Lists section, specify the substitution list that contains the mapping of tax categories in Acumatica ERP with the tax categories in the Shopify store in the Tax Category List box.

Import of Taxes: To Set Up Tax Synchronization

Story

Suppose that SweetLife is using Acumatica ERP and Avalara AvaTax for calculating and reporting taxes on the goods and services it sells. The company currently sells products and needs to collect taxes only in New York State.

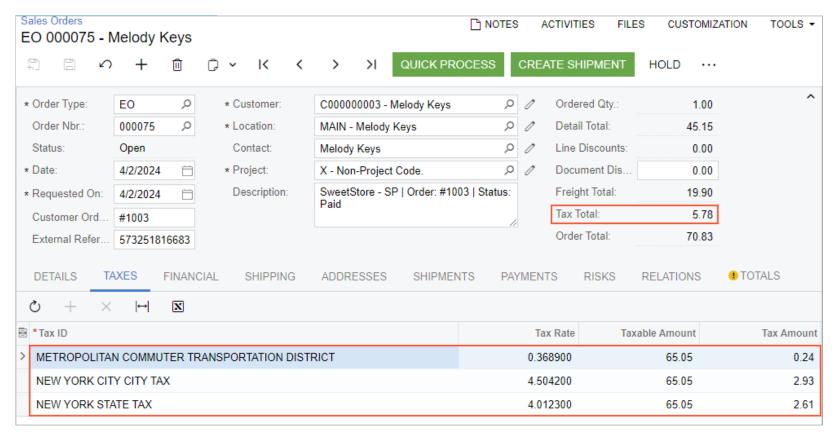
As an implementation consultant helping SweetLife to set up a Shopify store, you need to set up the tax calculation in the store for New York State and then make sure that the taxes calculated for online orders appear correctly in sales orders imported to Acumatica ERP.

Import of Taxes: To Set Up Tax Synchronization

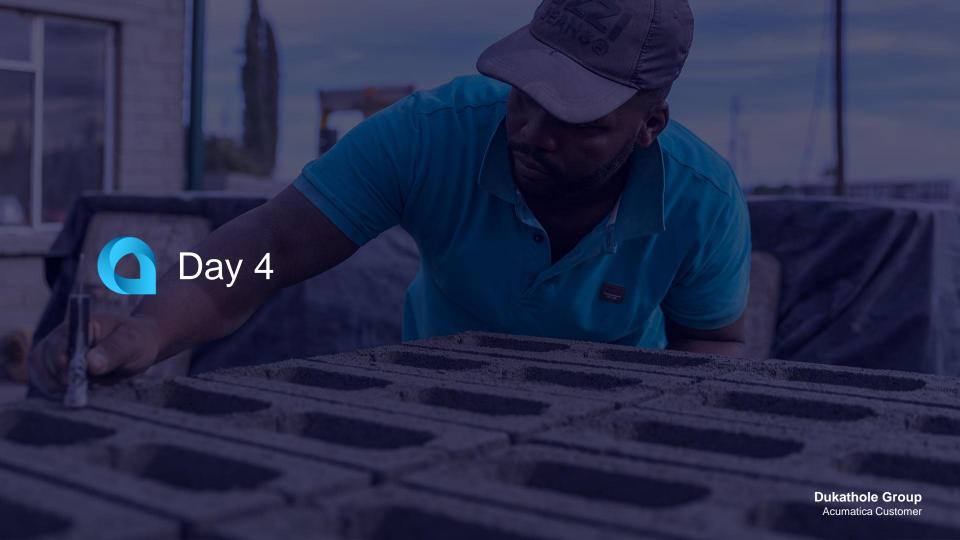
Process overview

Steps	Details
1. Activating the feature in ERP	Enable the External Tax Calculation Integration feature.
2. Review Tax set up in Shopify and ERP.	Review some of the tax-related entities
3. Specify the settings in the store settings form.	Specify the tax sync settings in Shopify Stores form. Review the mapping for tax categories in the substitution list.
4. Export an item to Shopify.	Create filtering condition and export the product to Shopify.
5. Create an order with tax in Shopify.	Make sure to create an order with tax in online store and import the order into ERP.
6. Import the order into ERP and review the order in ERP.	On the Sales Orders (SO301000) form, review the imported sales order.

Imported sales order with taxes







Lesson 4.3: Selling and Accepting Gift Cards

Learning Objectives

In this lesson, you will learn how to do the following:

- Create gift cards so that you can sell them in the Shopify store
- Set up gift cards as a payment method that can be used to pay orders placed in the Shopify store

Applicable Scenarios

You set up gift cards if you want to offer customers the ability to buy a gi□ card and then accept the sold gift cards as payments for orders.

Selling Gift Cards and Accepting Gift Cards as Payment

Selling Gift Cards

- Enable gift certificate functionality in Shopify and create gift certificates to be used.
- Define a non-stock item in Acumatica ERP.
- Specify the created non-stock item that will represent sold gift certificates in imported sales orders, on the Order Settings tab of the Shopify Stores (BC201010) form.

Accepting Gift Cards as Payment

- Map the store payment method representing a gi□ card to a payment method defined in Acumatica ERP on the Payment Settings tab of the Shopify Stores (BC201010) form.
- The document of the Prepayment type is created on the Payments and Applications (AR302000) form for the gift card payment, for the order paid by gift card.

Gift Cards: Process Activity

Story

Suppose that SweetLife wants to give its online customers the ability to purchase gift cards and use these cards when purchasing goods in the SweetLife online store. As an implementation consultant, you need to configure the gift card functionality—that is, the ability to sell gift cards as items and use the cards as payment methods—and test it.

Gift Certificates: Process Activity

Process overview

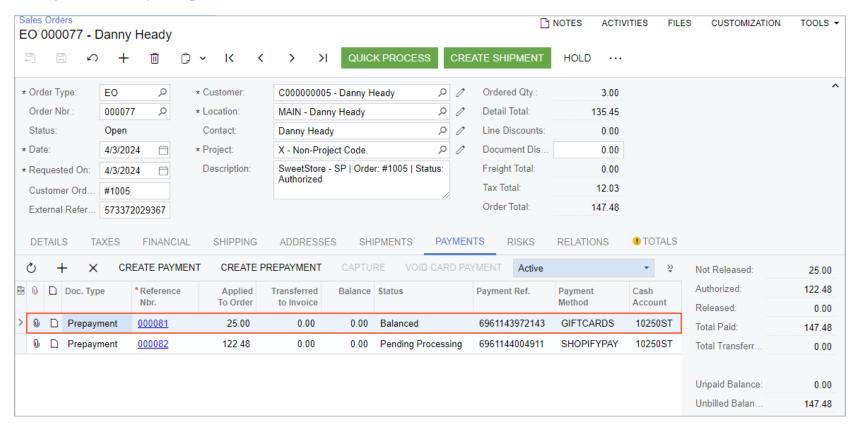
Steps	Details
1. Configuring the Store Settings	On the Shopify Stores (BC201010) form, configure the gift certificate settings.
2. Enable Gift Certificates functionality in the Store	In the control panel of the Shopify store, enable the gift certificate functionality and define gift certificates in various amounts to be sold in the online store.
3. Purchasing a Gift Certificate	On the storefront, purchase a gift certificate and send the gift card to the customer.
4. Importing the Order with the Gift Certificate	On the Prepare Data (BC501000) form, prepare the sales order data for synchronization, and on the Process Data (BC501500) form, you will process the prepared data.
5. Reviewing the Imported Order	On the Sales Orders (SO301000) form, review the imported sales order.

Gift Certificates: Process Activity

Process overview (continue)

Steps	Details
7. Paying for the Order with a Gift Certificate	On the storefront, you will create an order and pay part of it with the purchased gift certificate.
8. Importing the Sales Order Paid with the Gift Certificate	On the Prepare Data form, prepare the sales order data for synchronization, and on the Process Data form, you will process the prepared data.
9. Reviewing the Imported Sales Order	On the Sales Orders form, review the imported sales order corresponding to your order on the storefront that was partially paid for with the gift certificate.

Payment by a gift card applied to the sales order



Lesson 4.4: Import of an Order with Discounts

Learning Objectives

In this lesson, you will learn how to set up the import of sales orders with discounts from the Shopify store to Acumatica ERP.

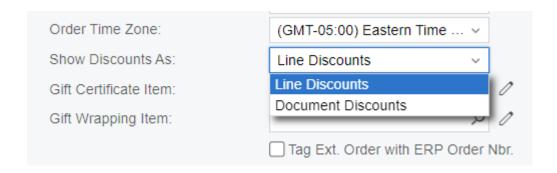
Applicable Scenarios

You specify the level at which discounts should be displayed in imported orders if the Customer Discounts feature is enabled on the Enable/Disable Features (CS100000) form.

Displaying of Discounts in Imported Orders

- On the Order Settings tab of the Shopify Stores (BC201010) form, you can select in the Show Discounts As box one of the following options:
 - Line Discounts Discounts applied to the order are distributed between the sales order lines.
 - Document Discounts Discounts applied to the order are aggregated.

Note : Customer Discounts feature should be enabled on the Enable/Disable Features (CS100000) form.



Import of Orders with Discounts: Process Activity

Story

Suppose that the SweetLife sales manager decided to offer discounts for some of the products that the company sells in its Shopify store. Starting from today, the company provides the following discounts:

- A 10 percent discount on the purchase of a 96-ounce jar of plum jam
- A five-dollar discount on the purchase of a 96-ounce jar of banana jam
- An additional discount in the amount of \$20 for the orders of \$500 or more

As SweetLife's implementation consultant, you need to create an order with discounts of multiple types, import it to Acumatica ERP, and then explore how the applied discounts are displayed in the imported order.

Import of Orders with Discounts: Process Activity

Configuration overview for U100 dataset:

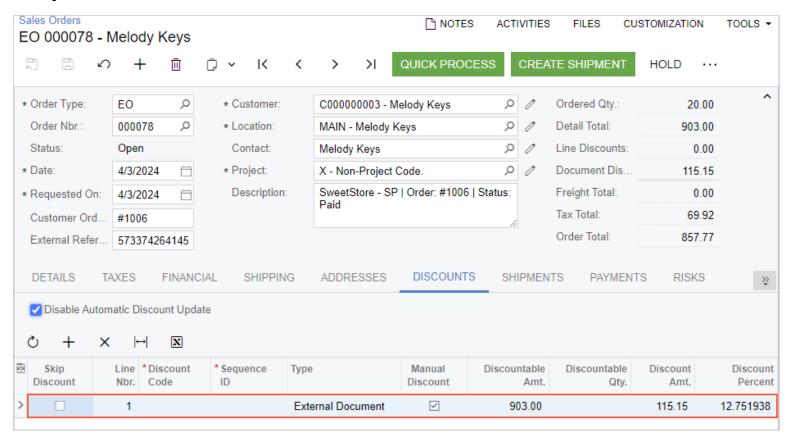
- On the Stock Items (IN202500) form, the following stock items have been created for the purposes of this activity:
 - BANJAM96
 - PLUMJAM96

Import of Orders with Discounts: Process Activity

Process overview

Steps	Details
1. Updating Discount-Related Settings	On the BigCommerce Stores (BC201000) form, update the discount-related settings.
2. Creating a Sales Order	In the control panel, create a sales order with the automatically applied discounts.
3. Importing the Sales Order	Prepare and Process data for the Sales orders on the Prepare Data (BC501000), Process Data (BC501500) forms
4. Reviewing the Discounts in the Imported Sales Order	On the Sales Orders (SO301000) form, review the imported sales order and applied discounts.
5. Deactivating the Discounts	In the control panel, the discounts will be deactivated.

Imported sales order with discounts





Lesson 5.1: Automating the Synchronization of Entities

Learning Objectives

In this lesson, you will learn how to do the following:

- Set up automation schedules for data preparation and processing
- Turn on real-time synchronization of entities
- Configure automated synchronization for optimized performance

Applicable Scenarios

You automate the synchronization of entities after you have configured and manually tested the synchronization between Acumatica ERP and the BigCommerce store to ensure that in your production environment, all needed data is exported and imported to the appropriate system in a timely manner.

Scheduled and Real-Time Synchronization

Options to automate the synchronization of data of a particular entity between Acumatica ERP and the Shopify store:

- Configure automation schedules for data preparation or for data processing on the Automation Schedules (SM205020) form.
- Turn on real-time synchronization for a particular entity on the Entities (BC202000) form.

Predefined Automation Schedules for Data Preparation and Processing

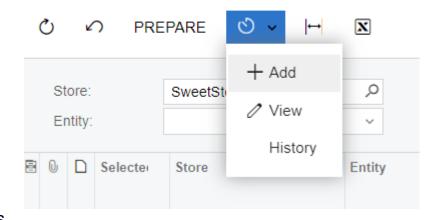
Schedule Description Execution	Frequency
Prepare Stock, Non-Stock, and Template Items	Daily, once a day
Prepare Product Availability Daily	Every hour
Prepare Sales Orders Daily	Every 10 min
Prepare Shipments Daily	Every 30 min
Prepare Refunds Daily	Every 20 min
Process Non-Stock Items Daily	Every hour
Process Stock Items Daily	Every hour
Process Template Items Daily	Every hour
Process Product Availability Daily	Every hour
Process Sales Orders Daily	Every 10 min
Process Shipments Daily	Every 10 min
Process Refunds Daily	Every 10 min

Defining Automation Schedules for Data Preparation

Steps configure and activate a new schedule for data preparation:

- On the Prepare Data form, in the Summary area, specify the BigCommerce store and the data preparation mode.
- In the table, select the unlabeled check box for each entity that should be processed when the schedule is executed.
- On the table toolbar, you click Schedule > Add.
 - Schedules form in a pop-up window.
- Specify a name and description for the schedule, as well as its frequency, expiration information, execution dates and times, and other settings.
- You activate and save the schedule.

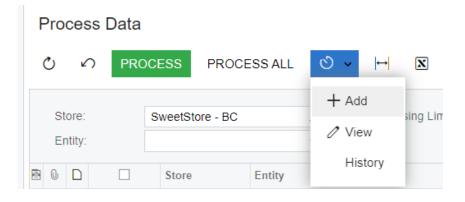
Prepare Data



Defining Automation Schedules for Data Processing

Steps configure and activate a new schedule for data processing:

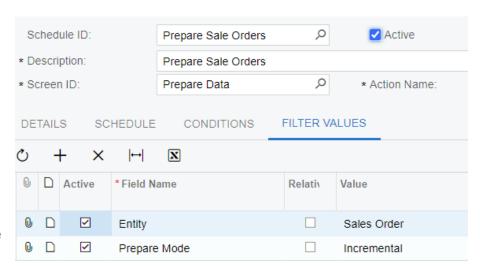
- In the Summary area of the Process Data form, you specify the BigCommerce store.
- On the table toolbar, you click Schedule > Add.
 - The system opens the Automation Schedules form in a pop-up window.
- Specify a name and description for the schedule, as well as its frequency, expiration information, execution dates and times, and other settings.
- You activate and save the schedule.



Automated Synchronization: Scheduled Synchronization

Steps activate and modify a predefined schedule:

- 1. Open the Automation Schedules form (SM205020) form.
- 2. Modify the schedule's settings as follows:
 - On the Filters tab, add a filter condition to include the store for which the schedule should be executed.
 - On the Schedule tab, adjust the schedule execution frequency, if necessary.
- 3. Activate the schedule by selecting the Active check box in the Summary area.
- 4. You save your changes to the schedule.



Automated Synchronization: Recommended Setup (no more than 1,000 orders daily)

Table: Recommended Synchronization Setup for Lower Volumes

Entity	Real-Time Synchronization	Data Preparation	Data Processing
Sales Order	Started Real-time mode: Prepare & Process	Daily, once a night	Daily, once a night
Refund	Started Real-time mode: Prepare & Process	Daily, once a night	Daily, once a night
Shipment	Started Real-time mode: Prepare & Process	Daily, once a night	Daily, once a night
Stock Item, Non-Stock Item, Template Item	Started Real-time mode: Prepare & Process	Daily, once a night	Daily, once a night
Product Availability	Stopped	Daily, every 60 minutes	Daily, every 60 minutes
Other entities	Stopped	Daily, once a night	Daily, once a night

Automated Synchronization: Recommended Setup (more than 1,000 orders daily)

Table: Recommended Synchronization Setup for Higher Volumes

Entity	Real-Time Synchronization	Data Preparation	Data Processing
Sales Order	Stopped	Daily, every 10 minutes	Daily, every 10 minutes
Refund	Stopped	Daily, every 20 minutes	Daily, every 10 minutes
Shipment	Stopped	Daily, every 30 minutes	Daily, every 10 minutes
Stock Item, Non-Stock Item, Template Item	Stopped	Daily, once a night	Daily, every 60 minutes
Product Availability	Stopped	Daily, every 60 minutes	Daily, every 60 minutes
Other entities	Stopped	Daily, once a night	Daily, once a night

Automated Synchronization: To Configure a New Automation Schedule

Story

Suppose that as an implementation consultant helping SweetLife to set up integration with Shopify, you want to configure continuous synchronization of entities. As part of the setup, you need to configure the system to synchronize new and updated customers between Acumatica ERP and the Shopify store once a day (at night).

Because Acumatica ERP does not provide any predefined automation schedules for the Customer entity, you need to create two automation schedules from scratch. The first schedule will prepare the customer data for processing, and the second schedule will start the processing of the prepared data.

Automated Synchronization: To Configure a New Automation Schedule

Process overview

Steps	Details
Scheduling of the Automatic Data Preparation for Customers	On the Prepare Data (BC501000) form, define the conditions for preparing data of the Customer entity.
	On the Automation Schedules form, create an automation schedule to start data preparation for the Customer entity once a day.
2. Scheduling of the Automatic Data Processing for Customers	On the Process Data (BC501500) form, define the conditions for processing data of the Customer entity.
	On the Automation Schedules form, create an automation schedule to start data processing for the Customer entity once a day.

Automated Synchronization: To Turn On Real-Time Synchronization

Story

Suppose that as an implementation consultant helping SweetLife to set up integration with Shopify, you want to configure continuous synchronization of particular entities. As part of the setup, you need to turn on real-time synchronization of shipments so that they are exported to the Shopify store as soon as they are created or updated in Acumatica ERP.

Automated Synchronization: To Turn On Real-Time Synchronization

Process overview

Steps	Details
1. Enabling Real-Time Synchronization for Shipments	You will turn on real-time synchronization for the Shipment entity on the Entities (BC202000) form so that the system immediately exports the changes in shipments to the BigCommerce store.

Acumatica ERP provides a set of predefined business events that can be activated to trigger the sending of an email notification to the administrator of an online store about aborted synchronization records.

- Predefined business events are available for entities: Sales Order, Payment, Shipment, Refund.
- The notification is sent when the commerce connector fails to process a synchronization record related to the entity if the maximum allowed number of failed attempts has been exceeded.
- Maximum allowed number of failed attempts can be set on the Entities (BC202000) form or on the Shopify Stores (BC201010) form.
- Steps to activate triggering of email by business events:
 - On the Connection Settings tab of the Shopify Stores form, specify the administrator of the store in the Administrator box.
 - On the Business Events (SM302050) form, activate the needed business event by selecting the Active check box in the Selection area for the event.

Table: Predefined Business Events for Aborted Synchronization Records

Business Event ID	Description	Generic Inquiry	Notification Tem- plate
BCAbortedOrder	Triggers notifications for aborted synchronization records of the <i>Sales Order</i> entity	BC-DB-AbortedOrders	Aborted Order Noti- fication
BCAbortedPayment	Triggers notifications for aborted synchronization records of the <i>Payment</i> entity	BC-DB-AbortedPayments	Aborted Payment Notification
BCAbortedRefund	Triggers notifications for aborted synchronization records of the <i>Refund</i> entity	BC-DB-AbortedRefunds	Aborted Refund No- tification
BCAbortedShipment	Triggers notifications for aborted synchronization records of the <i>Shipment</i> entity	BC-DB-AbortedShipments	Aborted Shipment Notification

Story

Suppose that you have configured the automated import of sales orders from the e-commerce store and want Jerald Stevens, an e-commerce manager of SweetLife, to be notified when the system has failed to process a synchronization record of a sales order too many times (based on the setting specified in the system) and has set its status to Aborted, which excludes the record from synchronization. To make the system send a notification to the e-commerce manager, Jerald Stevens, every time the synchronization of a sales order is aborted, you need to activate a predefined business event that will trigger the sending of an email message to the store administrator every time the status of a synchronization record of a sales order changes to Aborted.

Process overview

Steps	Details
Specifying the Store Administrator	On the Shopify Stores (BC201000) form, specify the store administrator who should receive email notifications about aborted synchronization records.
2. Activating the Business Event	On the Business Events (SM302050) form, activate a predefined business event
3. Reviewing the Notification Template	On the Email Templates (SM204003) form, review the notification template used for notifications about aborted sales orders.

Lesson 5.2: Monitoring Day-to-Day Commerce Operations

Learning Objectives

In this lesson, you will learn how to do the following:

- Monitor day-to-day e-commerce activities
- Identify synchronization issues and process individual synchronization records that the system failed to process

Applicable Scenarios

You monitor day-to-day activities and track failed and aborted synchronization records to ensure that all entities are synchronized between Acumatica ERP and the Shopify store correctly and in a timely manner.

The Commerce Sync Monitoring Dashboard

Widget	Description
Aborted Records	The number of synchronization records that have the Aborted status.
Failed Records	The number of synchronization records with the Failed status.
Unpaid Orders	The number of imported or exported orders that do not have payments applied
Not-Yet-Shipped Orders Placed >7 Days Ago	The number of orders that were created more than 7 days ago and still not shipped.
Total Revenue	The sum of the order total amounts (in the base currency)
Prepared for Processing	The number of synchronization records with the Prepared status
Processed in Last 7 Days	The number of synchronization records that have been processed in the last 7 days.
Total Processed	The number of synchronization records that have been processed.
Sales Orders	A line chart that shows the number of sales orders imported per day
Processed Records	A bar chart that shows the number of synchronization records that have been processed for each entity type.
Aborted Records	A table that shows the synchronization records with the Aborted status



The Sync History Form

The Sync History (BC301000) form shows synchronization status of all records related to a particular Entity and has filter tabs:

Tab	Description
All Records	all synchronization records
Ready to Process	active synchronization records that have the Prepared or Failed status
Failed	active synchronization records that have the Prepared or Failed status
Processed	active synchronization records that have the Processed status
Skipped	active synchronization records that have the Processed status
Aborted	active synchronization records that have the Processed status
Deleted	active synchronization records that have the Processed status
Filtered	active synchronization records that have the Processed status
Invalid	active synchronization records that have the Processed status
Inactive	synchronization records for entities that have been deactivated

Troubleshooting: To Monitor E-Commerce Operations

Story

Suppose that you are an eCommerce Manager at SweetLife Fruits & Jams. You start each day by checking the Commerce Sync Monitoring dashboard, which helps you understand how the synchronization of data between Acumatica ERP and the Shopify store is going and whether any synchronization issues have occurred that require your attention. While reviewing the synchronization statistics, you notice that the some of the synchronization records have not been processed. You need to investigate and fix the issue and then manually resynchronize the failed synchronization records.

Troubleshooting: To Prepare the System

Process overview

Steps	Details
1. Reviewing the Commerce Sync Monitoring Dashboard	On the Commerce Sync Monitoring dashboard, you will review the widgets and identify a synchronization record that the system had failed to process.
2. Updating the Stock Item	On the Stock Items (IN202500) form, you will fix the synchronization issue.
3. Processing the Failed Synchronization Record	On the Sync History (BC301000) form, you will manually resynchronize the synchronization record.



Tushar Pandita