



Suite Engine Channel Sales Manager Release Notes

Product: Channel Sales Manager for Shopify

Release: 4.0

Version: 4.0.2022112321.63152

Release Date: 11/23/2022

Minimum Business Central Version Compatibility: 19.0

Please install this release in your Business Central sandbox environment for testing. It is Suite Engine's recommendation that you test not only the areas specifically addressed within this release but all of your business processes, so that you may confirm that changes introduced in this release have not created issues in other parts of your application. These release notes should be fully reviewed as part of your testing process, as they may include information on new setup and configuration requirements.

If you encounter issues in your testing, please contact your Suite Engine partner or file a support ticket at <https://suiteengine.com/support>.

Once you have completed testing in your sandbox, you can proceed to installing this release in your live environment. Suite Engine recommends that users be logged out of Business Central prior to installation of the release; if this is not possible, please advise your users that it may be necessary to refresh or log out/log in to Business Central in order to continue working with the application.

This release is issued under the assumption that you have kept your existing Suite Engine applications current. Suite Engine cannot be held responsible for any issues that arise out of installing this release into an out-of-date environment.

This release is compatible with the Business Central version listed above as the **Minimum Business Central Version Compatibility** and all subsequent Business Central versions; if you are deploying this release in a Business Central environment that has an earlier version than this value, functionality may not work as intended.

This release may introduce new table objects or modifications to existing ones. If you are maintaining configuration packages for the purpose of moving data to and from database environments, you are advised to take note of any table changes (for a complete list of release objects, see [here](#)) and make any adjustments to these packages as needed.

Release Overview

Features and Functionality

- Support for Microsoft Dynamics 365 Business Central 2022 Wave 2 (version 21) has been added to CSM for Shopify.
- Shopify-specific accommodations have been made to support the **Role Center Headline Data** table that was added in a previous version of CSM Core. Starting with this release of CSM for Shopify, Shopify-specific headlines are stored in this table and are available for display in the **CSM Administrator** Role Center.
- Supporting data retrieval has been added for the following data types
 - Payment Methods
 - Inventory Locations

This functionality can simplify setup activities by allowing users to instantly populate CSM tables with records that have been retrieved from the external platform. See the [in-depth feature description](#) for more details.

- Order retrieval automation now retrieves payment intent information from Stripe.
- Shopify's "include tax in prices" feature is now supported by CSM for Shopify. Retrieved sales orders will indicate whether tax is included as part of item prices, and generate order totals in Business Central accordingly.
- It is now possible to create CSM listings with product data that has been retrieved from a connected Shopify platform. This is useful if you have already created products on your Shopify platform, and would prefer to use this external platform, rather than Business Central, as the basis for your CSM listings. See the [in-depth feature description](#) for more details.
- Shopify-specific accommodations have been made to support fields that were added to the **CSM Listing** table in a previous version of CSM Core that provide enhanced options when sending and retrieving inventory information between Business Central and a connected eCommerce platform:
 - **Send Availability:** enabling this field for a listing will instruct CSM to include that listing in the sending of inventory information from Business Central to an external platform.
 - **Compare Availability To:** the existing functionality in which CSM would compare a listing's calculated availability against the last availability value that was sent to the external platform has been expanded to allow for a second option. It is now possible to instruct CSM to compare the listing's calculated availability against the external inventory value that has been retrieved from the external platform.
 - **Auto Retrieve Channel Inventory:** when CSM's automation routines are executed, inventory availability for listings that have this setting enabled will be automatically retrieved from the external platform.
- Configurable item support has been added to CSM for Shopify. Configurable items refer to products that are available in multiple, variable configurations such as color or size. CSM for Shopify accommodates the creation and management of this item structure:
 - The CSM listing wizard identifies items that exist as "parents" to multiple "children" records in Business Central which represent different configurable item combinations and creates multiple CSM listings that reflect this parent/child relationship.
 - CSM item attributes that represent configurable values are automatically created for the sales channel in Business Central.
 - CSM listings for both the parent and children, as well as variable item attributes, can be exported from Business Central and used to create new records in Shopify.
 - Updates to configurable attribute values can be used to create new CSM listings and then communicated to Shopify.
 - Configurable items can be loaded from Shopify and used to create CSM listing and item attribute records in Business Central.

See the [in-depth feature description](#) for more details.

- Shopify-specific accommodations have been made to support a CSM Core feature that allows users to edit a CSM API message's response and then reprocess it. See the [in-depth feature description](#) for more details.

Corrections

- Credential information entered through the Shopify setup wizard was not being properly assigned to the related API credential record. This has been corrected.
- An incorrect API mapping was resulting in improper application of shipment discounts. This has been corrected.
- Adding items to retrieved sales orders in Business Central and then posting a partial shipment would result in CSM fulfilling the entire order in Shopify. This has been corrected.



Miscellaneous

- CSM for Shopify's automated test scripts have been expanded to include additional testing scenarios.
- CSM for Shopify's subscription management objects have been updated to include supported extension modules.

In-Depth Features

Supporting Data Retrieval

CSM allows you to retrieve or load the following supporting data types into Business Central from an integrated Shopify platform:

- Payment Methods
- Inventory Locations

Payment Method Data Retrieval

CSM allows you to retrieve payment methods into Business Central from an integrated Shopify platform. CSM payment methods correspond to "payment method" records in Shopify. Shopify uses this record type to represent specific payment processes, such as Stripe and PayPal.

Shopify does not offer API support for payment method retrieval, meaning it is not possible to obtain these records directly from your connected channel. However, CSM includes a dataload that includes Shopify's default payment methods. You can automatically load new CSM payment method records that are based on these defaults:

1. Choose the  icon, enter **CSM Sales Channels**, and then choose the related link.
2. Open the CSM sales channel record for which you want to retrieve payment methods.
3. Choose the **Related** ribbon, then select the **Setup** menu and choose the **Payment Methods** action.
4. In the **CSM Payment Methods** window, choose the **Actions** ribbon, then choose the **Retrieve Payment Methods** action.

CSM creates new CSM payment method records based on the default methods that are supported by Shopify. If CSM is able to identify a Business Central payment method code that is identical to a CSM payment method record's external ID, it will automatically link these records by assigning the value in the Payment Method Code field. If CSM cannot identify a payment method code that matches a CSM payment method external ID, a new payment method code will be created and assigned to the CSM payment methods.

5. In the **Payment Method Code** field, use the AssistButton to assign a Business Central payment method code to the payment method.
6. To provide additional instructions as to how CSM should process orders to which a given payment method is assigned, fill in the fields as follows:
 - **Automatic Application:** enter a check mark in this field to instruct CSM to automatically apply payments that are recorded for the payment method to the associated Business Central sales invoice or credit memo.
 - **Single Capture:** enter a check mark in this field to instruct CSM to permit only a single payment capture activity against this payment method.

Note: *Shopify does not permit multiple credit card payments for a given transaction. When you are defining a CSM payment method that is mapped to `shopify_payments`, the **Single Capture** field should be enabled.*

- **Perform Invoice Capture:** enter a check mark in this field to instruct CSM to automatically perform and send a capture transaction (such as a credit card settlement) to the external channel following the transmission of invoice activities recorded for the payment method.
- **Perform Capture for Zero Amt:** enter a check mark in this field to instruct CSM to automatically perform and send a capture transaction to the external channel following the transmission of invoice activity when an invoice amount is zero recorded for the payment method.

Note: the functionality to load CSM payment methods does not extend beyond the default methods that are included with the CSM dataload. If other payment methods are present in your Shopify environment, you must manually set up the related CSM payment method records in Business Central.

Inventory Location Data Retrieval

CSM needs to map inventory locations defined in Shopify to Business Central inventory locations. You can instruct CSM to retrieve inventory locations from Shopify. As part of this process, the external ID value for each CSM inventory location is automatically populated, making this a quick and easy way to set up CSM inventory locations. Once these locations have been retrieved, they can be mapped to Business Central locations.

1. Choose the  icon, enter **CSM Sales Channels**, and then choose the related link.
2. Open the CSM sales channel record for which you want to retrieve inventory locations.
3. Choose the **Related** ribbon, then select the **Setup** menu and choose the **Inventory Locations** action.
4. In the **CSM Inventory Locations** window, choose the **Actions** ribbon, then choose the **Retrieve Inventory Locations** action.

CSM retrieves location records from the sales channel's connected Shopify store and creates new CSM inventory location record for each one.

5. In the **Location Code** field, enter or use the AssistButton to map a Business Central location to the CSM inventory location.

Loading CSM Listings from Shopify Data

It is possible to import product information from your connected Shopify platform into Business Central, then create CSM listings from this data.

Note: the process of importing listing information from Shopify and into Business Central is meant to assist in the initial setup of your CSM listing management module. For the ongoing maintenance of products between platforms, we recommend using Business Central as the primary source and then exporting data to Shopify.

To load listings from Shopify:

1. Open the CSM sales channel that represents your Shopify platform.
2. Choose the **Related** ribbon, then select the **Setup Actions** menu and choose the **Load Products From Channel** action.
3. On the **Get Listings from Channel** page, confirm the correct sales channel has been selected, then choose the **OK** button.

CSM will import product data from Shopify and create a separate CSM listing record for each product. The external ID for each listing will be populated with the unique identification number assigned by Shopify.

4. Open each CSM listing, and on the **General** FastTab, enter the corresponding Business Central item number in the **No.** field to link the CSM listing to an item.

Note: you can automate this linkage prior to loading items from Shopify by assigning the product's channel item SKU as one of the Business Central item's item identifiers. When CSM creates a new listing with data from Shopify, it will determine if any Business Central items have an item identifier that shares that listing's channel item SKU; if it can find a match, it will assign the item to the new listing.

Configurable Items

Depending on your business, you may include configurable items as part of your product portfolio. A configurable item is an item that you offer in different variants based on variable attributes or characteristics.

For example, assume we are a company that sells apparel. We sell a t-shirt item in three colors (red, blue, and yellow) and three sizes (small, medium, and large), resulting in nine possible configurations. While we need to account for these nine variants in some manner, from a listing perspective we want to list just the top-level t-shirt item, then allow buyers to select their preferred color and size from the listing page.

You can use CSM's item variations module to define an item's variable characteristics (using our example above, these would be color and size), then create additional items or item variants that represent the different configurations of these characteristics. You can also use this variation framework to create CSM listings; if you use the CSM listing wizard to create a new listing for the top-level or "parent" item, CSM will automatically create CSM listings for any "children" items or item variants that have been selected for inclusion in the CSM listing creation process.

Setup

The configurable item features in CSM utilize an updated item attribute structure that stores different attribute data types in separate tables. If you wish to create CSM listings for configurable items, you must enable this structure for the relevant sales channel:

1. Choose the  icon, enter **CSM Sales Channels**, and then choose the related link.
2. Open the sales channel for which you want to create configurable items.
3. On the **Listing Management** FastTab, enable the **Enable New Attribute Design** field.

Configurable item listings also use the item variations module as the basis for listing creation. Accordingly, you must configure an item variation's SKUs:

1. Choose the  icon, enter **Item Variations**, and then choose the related link.
2. Open the item variation for which you want to create configurable items.
3. On the **SKUs** FastTab, choose the **Functions** ribbon, then choose the **Generate SKUs** action. CSM will build a value from the SKU item number and (if applicable) SKU variant code, then assign it in the **SKU** field on each line. If you intend to create CSM listings based on a configurable item's variations, a SKU must be assigned on the relevant variation SKU lines. Alternatively, you may manually enter a value that identifies the item variation SKU as a unique record in the **SKU** field.
4. Select all item variation SKU lines, choose the **Functions** ribbon, and then choose the **Update SKU Status** action to automatically update the SKU status for all selected lines to *Active*. SKUs are initially created with a status of



Pending, but if you intend to create CSM listings based on a configurable item's variations, you must update the status on the relevant variation SKU lines to either *Active* or *No Replenish*. Alternatively, you may manually select one of these values in the **SKU Status** field.

Configurable Item Listings

The process of creating CSM listings for configurable items is no different than the process of creating CSM listings for non-configurable or simple items:

1. Open the CSM sales channel record for which you want to create listings.
2. Choose the **Listing** ribbon, then choose the **Wizard** action.
3. On the first page of the wizard, enter or use the lookup in the **Item No.** field to assign the parent, or top-level Business Central item.

Note: *if you are creating CSM listings for a configurable item whose variations exist as item variants, do not populate the **Variant Code** field in the listing wizard. If you assign a specific variant code, the listing wizard will create a single CSM listing for that item variant. If you leave the **Variant Code** field blank, the listing wizard will create CSM listings for all variants.*

4. Choose the **Next** button.
5. In the **Sales Channel SKU** field, enter a value that will identify the CSM listing as a unique record for the CSM sales channel. By default, CSM will assign a SKU in this field based on the values that were entered on the first page of the wizard, but you can modify this, if desired.
6. Choose the **Next** button.
7. Choose the **Finish** button.

New CSM listings are created for the top-level parent item and the item/variant "children" that represent different configurable variations. The assigned product type for these CSM listings differs between parents and children:

- Parent listings have an assigned channel product type of *Configurable*.
- Child listings have an assigned channel product type of *Variation*.

As part of this record creation, the parent/child relationship is maintained between these listings. You can view this relationship by opening the CSM listing that represents the parent item and reviewing the **CSM Listing Children List** FastTab. This FastTab presents all of the CSM listing records that exist as children to the parent. This FastTab will be empty on the child listings.

Configurable Item Attributes

In addition to creating the CSM listing records themselves, the listing wizard will automatically create CSM item attributes for the variable attributes that differentiate the children listings. The manner in which listing attributes are presented also differs between parent and children listings. On the **CSM Listing Attribute List** FastTab for the parent listing, a separate line will be presented for each configurable attribute that is used to define item variations. The attribute value on these lines, however, will remain blank. The **CSM Listing Attribute List** FastTab on child listings will include a line for each attribute, as well as the attribute values that are assigned to that particular child.

If we revisit our earlier example where we have a top-level t-shirt item and children that vary by color and size, the **CSM Listing Attribute List** FastTab on the parent listing would present separate lines indicating that color and size are that



listing's configurable attributes. The **CSM Listing Attribute List** FastTab for the child listings would also include lines for color and size, but the value would be assigned as red, blue, small, medium, etc.

The CSM listing attributes that are created for configurable attributes are unique to each listing. There are no "shared" item attributes with Shopify. To use an example, if items 123, 456, and 789 all had a configurable attribute called *COLOR*, CSM would create three separate item attribute records identified as *123-COLOR*, *456-COLOR*, and *789-COLOR*.

Sending Configurable Item Listings to Shopify

The same setup activities and requirements that can be performed for any listing are relevant for configurable items. For example, descriptions and images can be assigned to CSM listings for configurable items. Setup activities and additional information only need to be entered for the configurable, parent item.

It is necessary to perform two separate data export activities to properly send a configurable item, its variable options and their values, and the configurable children records to Shopify. Both actions can be performed from the CSM listing for the configurable, parent item. Choose the **Actions** ribbon, then choose the **Channel Integration** menu and execute the following functions in order:

- **Send Listing Base Info to Channel:** this will send basic information about the configurable item to Shopify. A new product will be created in your Shopify platform based on the listing's information. Shopify will assign a unique identification number to this record; this value will be retrieved by CSM and presented in the **External ID** field on the listing's **Listing Status** FastTab.
- **Send Config Children To Channel:** this will send the listing's children, configurable options, and their values to Shopify. This information is assigned to the Shopify product; the configurable options and their values can be viewed in the **Options** section of the Shopify product record, while the children and can be viewed in the **Variants** section. These children are not created as separate Shopify products, but rather variants of the original, top-level item. Shopify will assign a unique identification inventory and SKU number to each configurable child; these values will be retrieved by CSM and presented in the **External Inventory ID** and **External SKU ID** fields on the child listing's **Inventory Information** FastTab.

Product Listing Availability

The process of updating Shopify with a product listing's availability is no different for configurable items as other listings. You can calculate channel availability for CSM listings for child items, then send this information to Shopify. The stock quantities for the relevant product variants are updated accordingly.

Updating Configurable Option Values

It may be that you wish to add configurable option values over time. For example, suppose we have a configurable option called "Color" set up in Business Central, with option values of Red, Blue, and Yellow. At some point, we want to add Green to this list of option values. In this scenario, it is necessary to update a number of records:

Create and Explode New Item Variation SKUs

If you are using the item variations framework to manage your configurable items, you must add the new item variation option value, then use this information to create a new item or item variant in Business Central:

1. Open the item variation that you want to update.
2. Add the new item variation option value to the desired option. The manner in which you enter this information depends on whether the item variation option is linked to a Business Central item attribute.
3. On the **Item Variation Card** page, choose the **Actions** ribbon, then choose the **Create Item Variation SKUs** action. The system will enter new lines for the new configurable option value in the **SKUs** FastTab.
4. Choose the **Actions** ribbon, then choose the **Explode SKUs** action.

5. Choose the **OK** button.

Business Central records are created for the new variation SKUs.

6. On the **SKUs** FastTab, choose the **Functions** ribbon, then choose the **Generate SKUs** action. CSM will build a value from the SKU item number and (if applicable) SKU variant code, then assign it in the **SKU** field. If you intend to create CSM listings based on a configurable item's variations, a SKU must be assigned on the relevant variation SKU lines. Alternatively, you may manually enter a value that identifies the item variation SKU as a unique record in the **SKU** field.
7. With the new item variation SKU selected, choose the **Functions** ribbon, then choose the **Update SKU Status** action to automatically update the SKU's status to *Active*. SKUs are initially created with a status of *Pending*, but if you intend to create CSM listings based on a configurable item's variations, you must update the status on the relevant variation SKU lines to either *Active* or *No Replenish*. Alternatively, you may manually select one of these values in the **SKU Status** field.

Update the CSM Item Attribute Values

Once you have added a new item variation option value, you must update the corresponding CSM item attribute accordingly:

1. Open the CSM sales channel record for which you want to update item attribute values.
2. Choose the **Related** ribbon, then select the **Listing** menu and choose the **Channel Item Attributes** action.
3. Select the CSM item attribute you want to update, then choose the **Edit** action in the ribbon.
4. Choose the **Actions** ribbon, then select the **Data Synch** menu and choose the **Synch Option Values** action.

Newly-added attribute values will be added to the **Item Attribute Options** FastTab.

Create New CSM Listings and Send Information to Shopify

A CSM listing must be created for each new item variant that has been added to the list of the configurable item's children:

1. Open the CSM sales channel record for which you want to update item attribute values.
2. Choose the **Related** ribbon, then select the **Listing** menu and choose the **Channel Listings** action.
3. Open the top-level parent configurable item listing you want to update.
4. Choose the **Actions** ribbon, then select the **Data** menu and choose the **Synchronize Item Variations** action.

New CSM listings will be created for the newly-added attribute value. These listings will be added to the lines on the configurable item's **CSM Listing Children List** FastTab.

Now that you have updated the CSM item attributes and CSM listings, you can send this information to Shopify:

1. From the CSM listing for the configurable, parent item, choose the **Actions** ribbon, then choose the **Channel Integration** menu and execute the **Send Config Children To Channel** action. This will send the new listings, configurable options, and their values to Shopify. This information is assigned to the Shopify product; the configurable options and their values can be viewed in the **Options** section of the Shopify product record, while the children can be viewed in the **Variants** section. These children are not created as separate Shopify products, but rather variants of the original, top-level item. Shopify will assign a unique identification inventory and SKU number to each configurable child; these values will be retrieved by CSM and presented in the **External Inventory ID** and **External SKU ID** fields on the child listing's **Inventory Information** FastTab.



Retrieving Configurable Items from Shopify

Executing the [load products from channel action](#) for a sales channel retrieves all products from the connected eCommerce platform and creates corresponding CSM listings in Business Central. This includes any configurable items that you have set up in Shopify. CSM creates CSM listings are created for the top-level parent configurable item as well as each child variant.

As with any CSM listing that is retrieved from Shopify, it is necessary for you to associate configurable item listings to Business Central items or variants by using the **Type** and **No.** fields on the **General** FastTab to select the relevant record.

Reprocessing CSM API Messages

There may be scenarios in which it is necessary to reprocess an API message response. For example, a connectivity issue might create an issue with an API message as it is being processed, leading to an incomplete activity. In such a scenario, the message may need to be edited and then reprocessed.

To edit and reprocess an API message:

1. Choose the  icon, enter **CSM API Messages**, and then choose the related link.
2. Choose the CSM API message record you want to edit and reprocess. You can only edit CSM API messages with a message status of *Response*.
3. Choose the **Actions** ribbon, then choose the **Edit Response Message** action. This action will only be visible for CSM API messages with a message status of *Response*.
4. In the **CSM Reprocess API Message** window, make the necessary changes to the CSM API message's response text.
5. Choose the **Actions** ribbon, then choose the **Reprocess** action.

CSM will reprocess the CSM API message according to the new response information. If the record is successfully processed, its status will be updated accordingly.

Release Objects

The following objects have been created, modified, or removed as part of this release:

Object Type	Object ID	Object Name	Action
Page	70338376	CSM Shopify Setup Wizard	Modified
Codeunit	51500	CSM Shopify Test Install	Modified
Codeunit	51501	CSM Shopify Test Library	Modified
Codeunit	51502	CSMShopifyTestAzureFunctions	Created
Codeunit	51504	CSM Shopify Test	Created
Codeunit	51505	CSM TaxAreaCode Cross Ref Test	Created
Codeunit	70338375	CSM Shopify Utility Functions	Modified
Codeunit	70338376	CSM API Shopify Processing	Modified
Codeunit	70338377	CSM Shopify Response Mgt	Modified
Codeunit	70338378	CSM Stripe Integration Shopify	Modified



Object Type	Object ID	Object Name	Action
Codeunit	70338379	CSM Shopify Data Load	Modified
Codeunit	70338380	CSM Shopify Upgrade	Modified
Codeunit	70338381	CSM Shopify Product Management	Modified

Release Extensions

The following extensions have been created, modified, or removed as part of this release:

Object Type	Object ID	Object Name	Action	Extends
TableExtension	70338375	CSM Listing Shopify Additions	Modified	CSM Listing
PageExtension	70338375	CSMSetupShopifyAdditions	Modified	CSM Setup
PageExtension	70338378	CSM Sales Channel Shopify	Modified	CSM Sales Channel
PageExtension	70338379	CSM Listing Shopify Additions	Modified	CSM Listing
PageExtension	70338384	CSM Payment Methods Shopify	Created	CSM Payment Methods
PageExtension	70338385	CSM Inventory Location Shopify	Created	CSM Inventory Locations

Integration Events

The following integration events have been added as part of this release:

Object Type	Object ID	Object Name	Integration Events
Codeunit	70338377	CSM Shopify Response Mgt	<ul style="list-style-type: none"> OnAfterGeneralDataSubmitToShopifyResponse OnAfterGeneralShopifyResponseV2