

1 Welcome to Tinx E-Commerce Connector

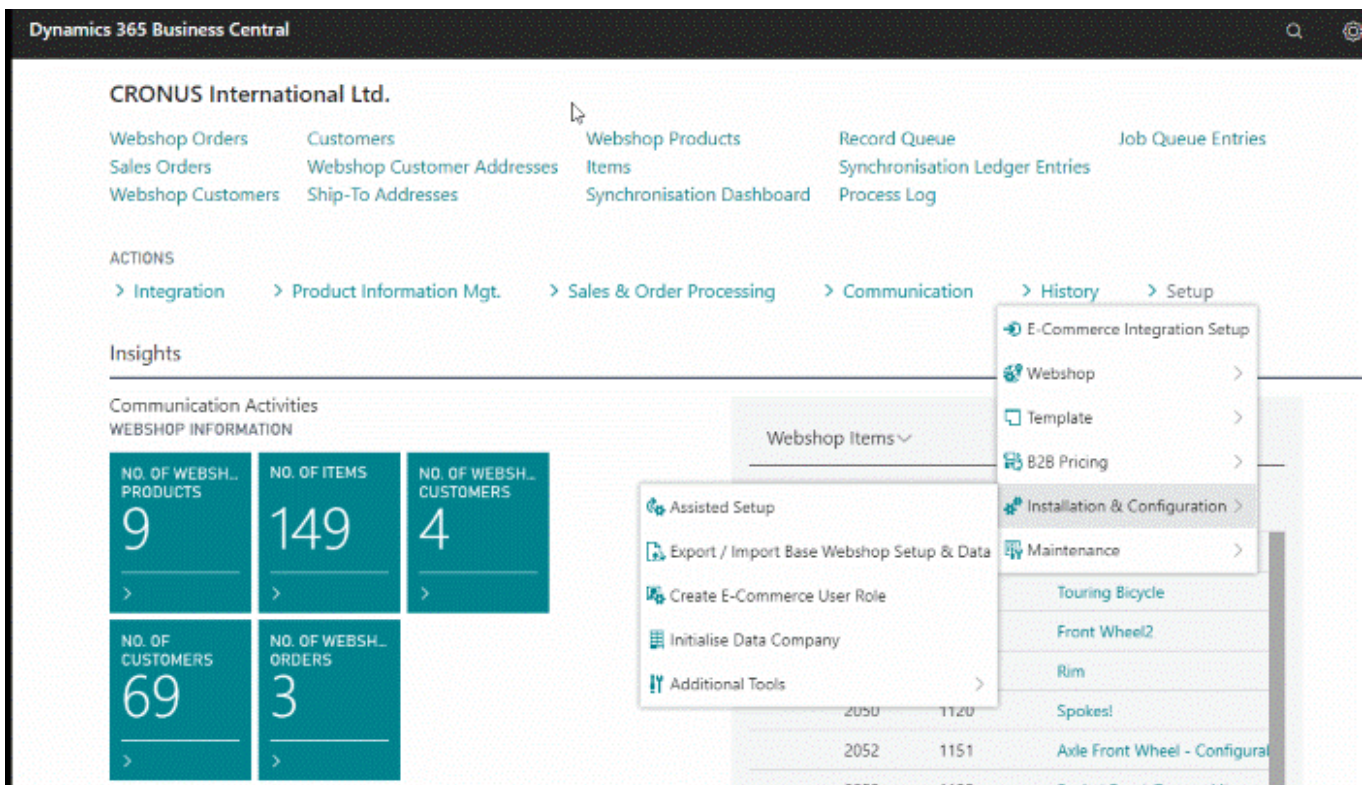
What is E-Commerce Connector

The connector makes it possible to setup seamless integration between multiple webshop platforms and Microsoft Dynamics 365 Business Central.

With the extended Product Information Management tool, which is part of the solution you can maintain all your items in Business Central.

The solution utilises the provided default API's of the platform. API can be SOAP or REST API.

With the generic user interface you can easily map the data between the two systems.



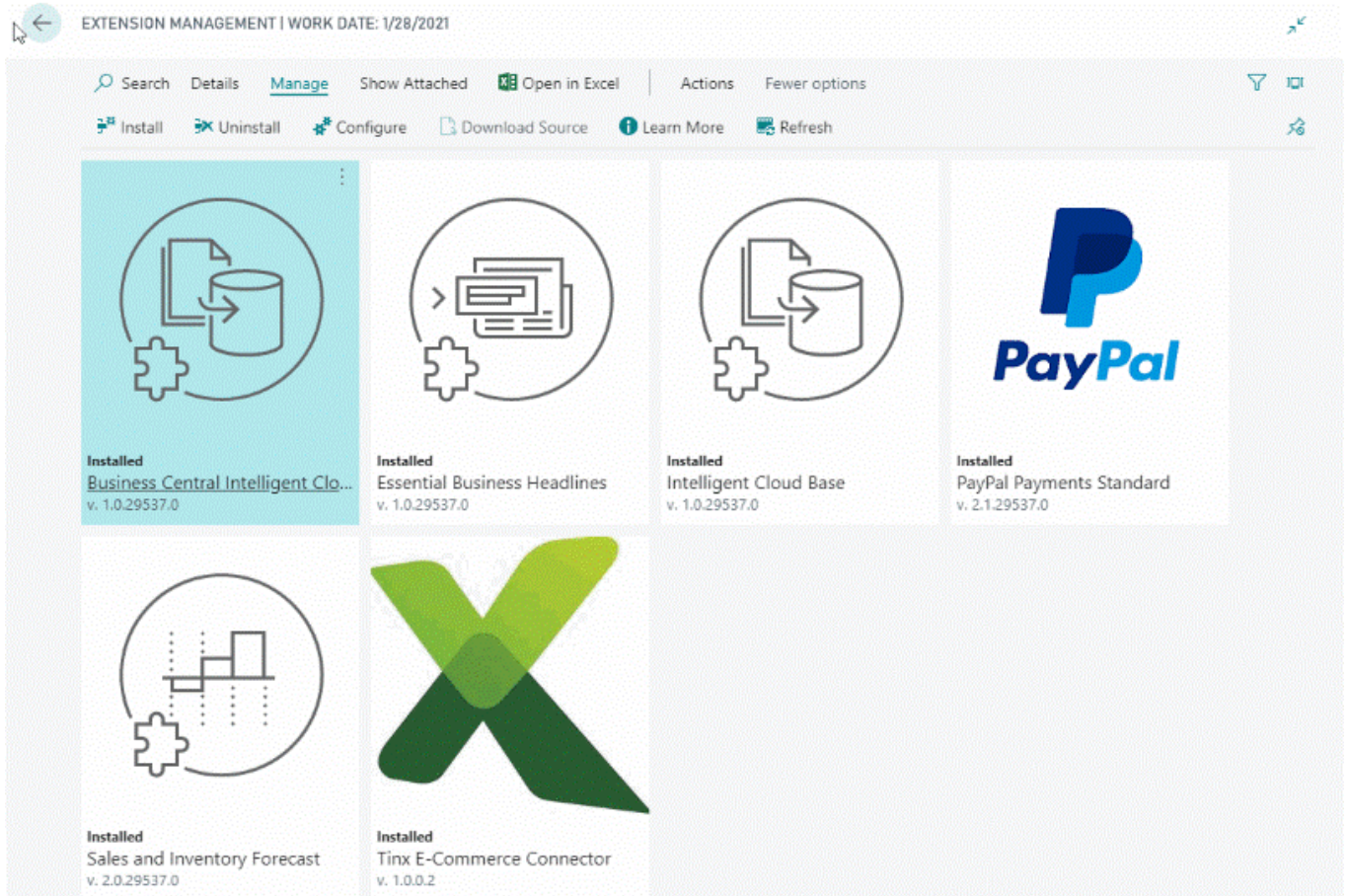
Supported e-commerce platforms

- **Magento (Section 7.1)**
- **WooCommerce (Section 7.2)**
- **Shopify (Section 7.3)**
- **Amazon (Section 7.4)**

2 Installation

2.1 Install Extension

Go to Extension Management, click **Manage**, select **Install**, choose the package you have received. After installation this will be the result:



2.2 New fields in std. tables

If the extension is installed these new fields are added to the standard tables:

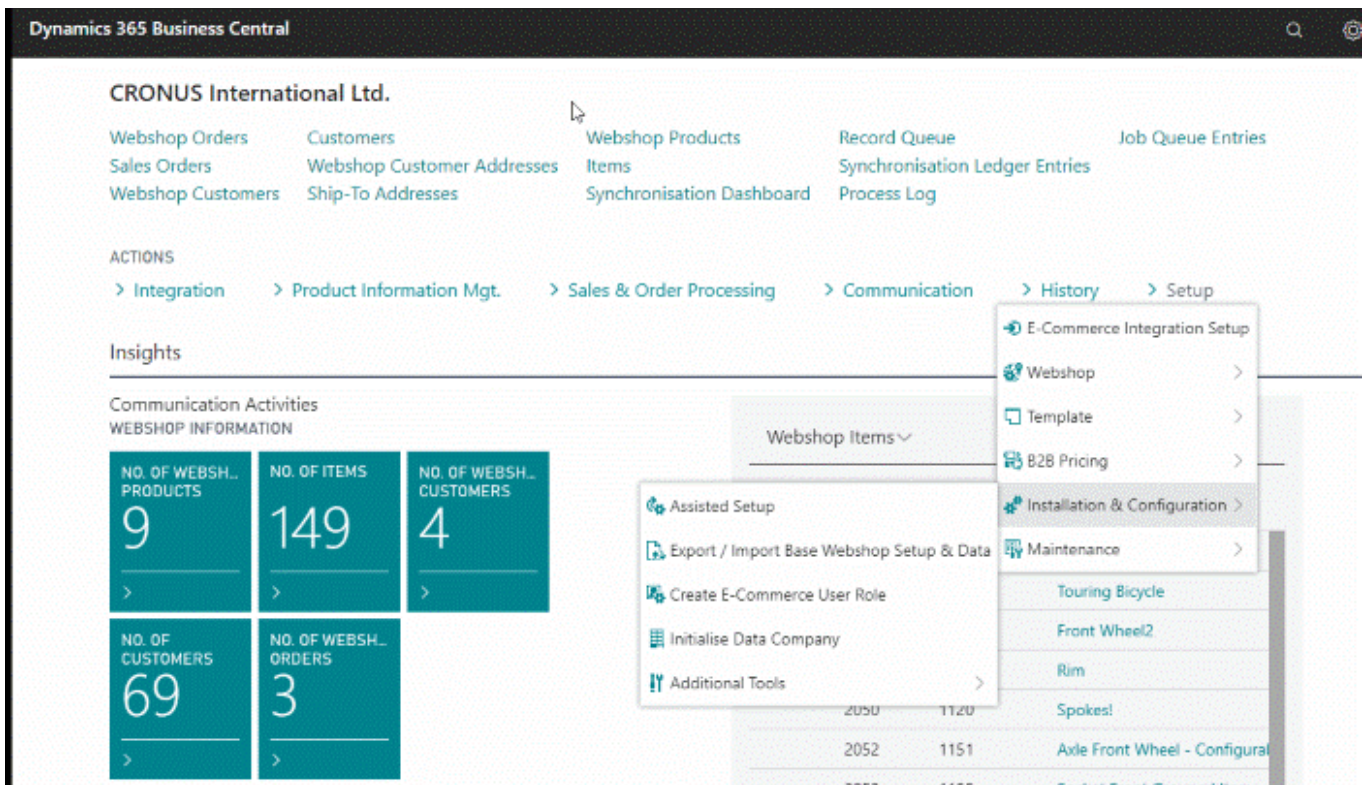
Table No.	Table Name	Field No.	Field Name	Field Type	Type of webshop
18	Customer	11205249	TINX Webshop Blocked	Boolean	B2C / B2B
		11205250	TINX Publish to Webshop	Boolean	
		11205251	TINX Webshop Customer ID	BigInteger	
		11205252	TINX Webshop Address ID	BigInteger	
		11205253	TINX Webshop Discount Value ID	BigInteger	
		11205254	TINX Webshop Sublogin ID	BigInteger	

27	Item	11205250	TINX Publish to Webshop	Boolean
		11205251	TINX Webshop Product ID	BigInteger

2.3 Assisted Setup

Open Dynamics 365 Business Central, Search for the Assisted Setup within the E-Commerce department.

Click the Assisted Setup option. After running the Assisted Setup a Sales Channel will be created.



2.4 Sales Channels

Sales Channels contains all connection information for a webshop platform.

MAGENTO2

Show Attached

General

Code	<input type="text" value="MAGENTO2"/>	API Endpoint	<input type="text" value="https://bc231.tinxit.singto.dev/soa"/>
Description	<input type="text" value="Magento 2.x"/>	End Point In	<input type="text"/>
Website	<input type="text" value="https://bc231.tinxit.singto.dev"/>	Authorization Type	<input type="text" value="Bearer Token"/>
Use HTTPS	<input checked="" type="checkbox"/>	Bearer Token	<input type="text" value="nxgllktxgzv7t5hsl6udj6nroyhxeferr"/>
Security Protocol	<input type="text" value="TLS1.2"/>	Webserver Time Diffe...	<input type="text" value="0"/>

E-Commerce >

License >

Processing Requests & Responses >

Security Protocols

Network security protocols are a type network protocol that ensures the security and integrity of data in transit over a network connection. Network security protocols define the processes and methodology to secure network data from any illegitimate attempt to review or extract the contents of data. You can choose which security protocol is used for the connection with the webshop. This ensures that all data is secured.

Protocol	Description
TLS 1.1	Transport Layer Security
TLS 1.2	Transport Layer Security
SSL 3	Secure Socket Layer: this method is deprecated

Authorization Type

Several authentication types are possible:

3 Product Catalog

3.1 Items Webshop List

Navigate to the Items in the e-commerce department. This page will appear. On this page you can enrich the items with relevant webshop data.


CRONUS International Ltd.

Webshop Orders Customers Webshop Products Record Queue Job Queue Entries
 Sales Orders Webshop Customer Addresses Items Synchronisation Ledger Entries
 Webshop Customers Ship-To Addresses Synchronisation Dashboard Process Log

Items: All | Search | Item | Webshop | Batch Functions | Variants | Open in Excel | Navigate

NO.	PU... TO WE...	WEBSHOP PRODUCT ID	DESCRIPTION	DESCRIPTION 2	INVENTORY
1896-S	<input type="checkbox"/>		ATHENS Desk		254
1900	<input type="checkbox"/>		Frame		152
1900-S	<input checked="" type="checkbox"/>		PARIS Guest Chair, black		299
1906-S	<input type="checkbox"/>		ATHENS Mobile Pedestal		254
1908-S	<input type="checkbox"/>		LONDON Swivel Chair, blue		305
1920-S	<input type="checkbox"/>		ANTWERP Conference Table		96
1924-W	<input type="checkbox"/>		CHAMONIX Base Storage Unit		26
1925-W	<input type="checkbox"/>		Conference Bundle 1-6		0
1928-S	<input type="checkbox"/>		AMSTERDAM Lamp		272
1928-W	<input type="checkbox"/>		ST.MORITZ Storage Unit/Draw...		67
1929-W	<input type="checkbox"/>		Conference Bundle 1-8		0
1936-S	<input type="checkbox"/>		BERLIN Guest Chair, yellow		136
1952-W	<input type="checkbox"/>		OSLO Storage Unit/Shelf		15
1953-W	<input type="checkbox"/>		Guest Section 1		0

Item Picture



Item Details - Web Extension

Product Type	Simple
Visibility	Catalog and Search
Status	Enabled
Manage Stock	Yes
Out Of Stock Level	0.00
Backorders	No Backorders

3.2 Attribute Sets

Attribute set is a list of certain individual product attributes, which fully describe all product's characteristics. Attribute set is used during every new product creation. This step lets one add all import information about the product in one step. Every single set is a combination of specific attributes.

ATTRIBUTE SET | WORK DATE: 1/28/2021 ✓ SAVED [↗](#)

Search + New Edit List Delete Attribute Set Download Open in Excel

CODE	NAME	ITEM CATEGORY	COPY OF SET	NO. OF ATTRIBUTES	NO. OF CUSTOM OPTIONS	NO. OF ITEMS
DEFAULT	Default Attribute Set			1	0	7
FASHION	Fashion		DEFAULT	1	0	1
FOOD	Food		DEFAULT	1	0	0

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3.3 Web Item Links

In webshops it is possible to use Item Links. With these product links you can put the attention of your webshop customers on other products or extend the product information. In BC you can maintain these product links on the Webshop Item Page Card (Webshop > List > Items > Card Page)

The following types of links are available:

- **Cross-sell** items appear in the shopping cart. When a customer navigates to the shopping cart (this can happen automatically after adding a product), the cross-sells block displays a selection of items marked as cross-sell items to the items already in the cart. Cross-sell items are similar to impulse buys - like magazines and candy at the cash registers in grocery stores.
- **Up-sells** for this product are items that your customers would ideally buy instead of the product they are viewing. They might be of better quality, produce a higher profit margin, be more popular, etc. These items appear on the product info page.
- **Related** products appear in the product info page as well, in the right column. Related products are meant to be purchased in addition to the item the customer is viewing. They can be spare parts for instance.
- **Grouped products** allow you to create a new product using one or more existing products in your store. The links are shown for a grouped product via the 'Associated Product' tab in the webshop.

You can easily add additional or related items for a product by clicking the type of link you want to use in the item card. In the Item Card, go to: Related Information > Webshop > Items

3.4 Mandatory Fields

To synchronize the BC items to the webshop, the following information is required for the webshop:

Field	Field Name	Comments
1.	SKU	Identifier in shop
3.	Description	
18.	Unit Price	
	Attribute Set	Assign each item to an Attribute Set
	Status	Field is available in table TINX Web Item Extension Options: Enabled or Disabled
	Product Type	Field is available in table TINX Web Item Extension
68.	Stock	
	Visibility	Field is available in table TINX Web Item Extension Options:

4 Order Processing

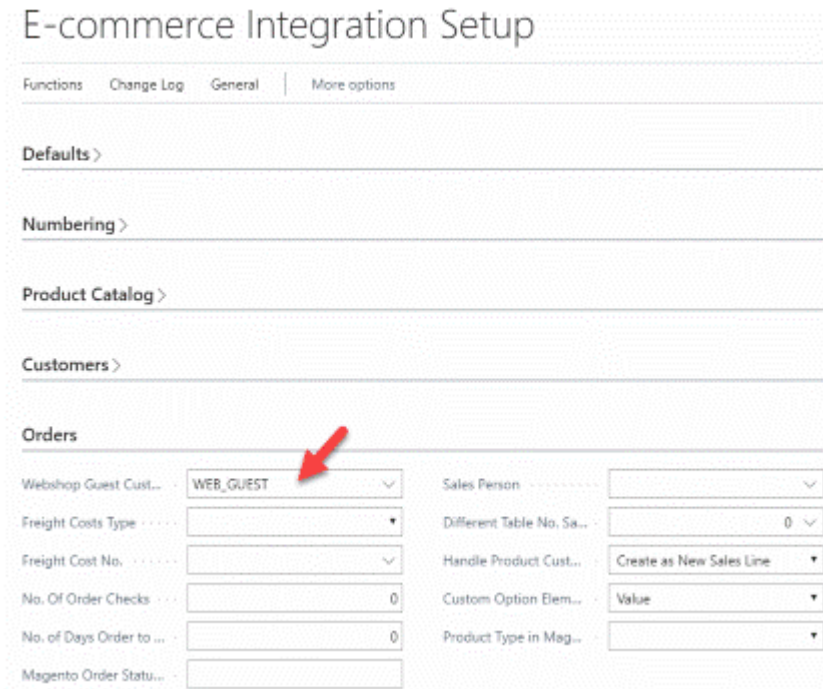
4.1 Download Orders

4.2 Create orders in BC

5 Customers

5.1 Guest Customers

If it is allowed to order as a guest customer in the webshop (Without registering), you should define a Customer No. for these guest orders. You can define the Webshop Guest Customer No. in the **E-commerce Integration Setup**:



The guest customer no. will appear in the page Webshop Customers with ID = 0:

PR... NAV	NO. OF WEBSHOP ORDERS	FIRST NAME	LAST NAME	FULL NAME	COMPAI
<input checked="" type="checkbox"/>	0	Webshop	Guest	Webshop Guest	Guest C
<input checked="" type="checkbox"/>	0	01121212	Spotsmeyer's Furnishings	01121212 Spotsmeyer's Furnis...	Spotsm

NAV Details

Customer No. WEB_GUEST

Contact No.

5.2 Download web customers

5.3 Apply Customer Templates

5.4 Create as Customer

5.5 Create as Contact

6 Communication

6.1 Job Queue

Job queues in Business Central enables users to schedule and run specific reports and codeunits. You can set jobs to run one time, or on a recurring basis. For example, you might want to run the Salesperson - Sales Statistics report weekly, to track sales by salesperson each week, or you might want to run the Process Service E-mail Queue codeunit daily, to make sure pending email messages to customers regarding their service orders are sent out in a timely manner.

The Job Queue Entries page lists all existing jobs. If you add a new job queue entry that you want to schedule, you must specify information about the type of object you want to run, such as a report or codeunit, and the name and object ID of the object that you want to run. You can also add parameters to specify the behavior of the job queue entry. For example, you can add a parameter to only send posted sales orders. You must have permission to run the particular report or codeunit, or an error will be returned when the job queue is run.

A job queue can have many entries, which are the jobs that the queue manages and runs. Information in the entry specifies what codeunit or report is run, when and how often the entry is run, in what category the job runs, and how it runs.

Installed tasks for the webshop integration

By default these jobs are created when the software is activated. The 2 codeunits are responsible for downloading data or sending data to the webshop.

STATUS	USER ID	OBJECT TYPE TO RUN	OBJECT ID TO RUN	OBJECT CAPTION TO RUN	DESCRIPTION	JOB QUEUE CATEGORY CODE	USER SESSION STARTED
On Hold	TRANSIP-VPS\ADMINISTRATOR2	Report	11205251	Remove Log and History Data	Remove Log and History Data	WEBSHOP	
On Hold	TRANSIP-VPS\ADMINISTRATOR2	Report	11205808	Assign Item to Web Category for...	Assign Item to Web Category f...	WEBSHOP	
On Hold	TRANSIP-VPS\ADMINISTRATOR2	Report	11205267	Reset No. Of Order Checks	Reset No. Of Order Checks	WEBSHOP	
Ready	TRANSIP-VPS\ADMINISTRATOR	Codeunit	11205263	TINX NAS Inbound Mgt.	TINX NAS Inbound Mgt.	WEBSHOP	
Ready	TRANSIP-VPS\ADMINISTRATOR	Codeunit	11205261	TINX NAS Outbound Mgt.	TINX NAS Outbound Mgt.	WEBSHOP	

6.2 Synchronisation Dashboards

In the synchronisation dashboard you can setup and activate all webservice methods to communicate with the e-commerce platform. This is also the primary logging and monitoring tool to check all events and processes.

Each Synchronisation Dashboard is linked to a Sales Channel. The channel is taking care for the access.

STD2_OUT_PRODUCTS

Functions | History | Actions | Navigate | Fewer options

General

Code STD2_OUT_PRODUCTS ... Processing Policy On Timer ▾

Description Send product related info to Magento Priority 0

Direction Type Outbound ▾ Channel MAGENTO2 ▾

Status Released ▾

Lines | [Line](#)

Card
 Events / Triggers
 Message Definition
 Filters

DOCUMENT NO.	WEBSERVICE	DESCRIPTION	FILTER EXIS...	NO. OF EVENTS	DIRECTIO...	TRIGGER RECORD ON	PRIORITY
	--- Category ---		No	—	Inbound		0
MAG2-075	catalogCategoryRepositoryV1Sav...	Create / Update Category in M...	Yes	—	Outbound	OnModify	0
MAG2-078	catalogCategoryRepositoryV1De...	Delete Category in Magento	No	—	Outbound	OnDelete	0
MAG2-080	catalogCategoryLinkRepositoryV...	Assign product to a category in...	Yes	—	Outbound	OnModify	0
MAG2-082	catalogCategoryLinkRepositoryV...	Remove a product from category	No	—	Outbound	OnDelete	0
MAG2-082	catalogCategoryLinkRepositoryV...	Remove a product from category	Yes	—	Outbound	OnModify	0
	--- Products ---		No	—	Inbound		0
MAG2-020	catalogProductRepositoryV1Save...	Create product in Magento	Yes	6	Outbound	OnModify	20
MAG2-020	catalogProductRepositoryV1Save...	Update product in Magento	Yes	8	Outbound	OnModify	10
MAG2-024	catalogProductRepositoryV1Dele...	Delete product in Magento	Yes	—	Outbound	OnModify	0
MAG2-024	catalogProductRepositoryV1Dele...	Delete product in Magento	No	—	Outbound	OnDelete	0
	--- Images / Videos and Links ---		No	—	Inbound		0

3 synchronisation triggers

- **OnInsert:** This filter is based on the Primary Key for records which not have been send before and which are created by the system (You mostly use this option for postings as: item ledger entry (Stock), posted shipments, sales invoices) If you set the trigger on 'OnInsert' only one time the record will be sent, based on the primary key. If you want to send a record again, you have to delete the appropriate entry in History > Registers. You can also use 'OnInsert' to do an initial sync when you are starting with the integration
- **OnModify:** send information each time a record is manually inserted or modified (done by own change log). Data which is modified in a batch process will not be considered (Rapid Start), only manual changed data done by users.
- **OnDelete:** when a record is deleted in BC you can send an update to the webshop to remove the data

Setting Filters

For each line you can set the appropriate filters for sending data. In the standard package several filters are already included, for example, this filter is defined for sending items: Publish to webshop = 1.

Automatic Processing

For automatic processing by the Job Queue you have to set the following fields in the dashboard:

Status: Released

Processing Policy: On Timer

6.3 Record Queue

In the **Record Queue** page you will find the list of all manual changes entered in the system by users, which must be processed to the webshop.

If the field 'Processed By' is filled then the Service Tier is busy processing these changes. When the task is completed all existing record queue entries will be deleted.

Enable Partial Queue

If the outbound daily changes are huge and it takes a long time before all changes are processed by the webshop, you can split this outbound task in batches. You can go to the **E-Commerce Integration Setup** and enable 'Partial Queue', you set the value how many records should be processed in a batch.

Advantage of this setting is that the Inbound Job is running much more often. So the orders are dropping in quicker in Business Central.

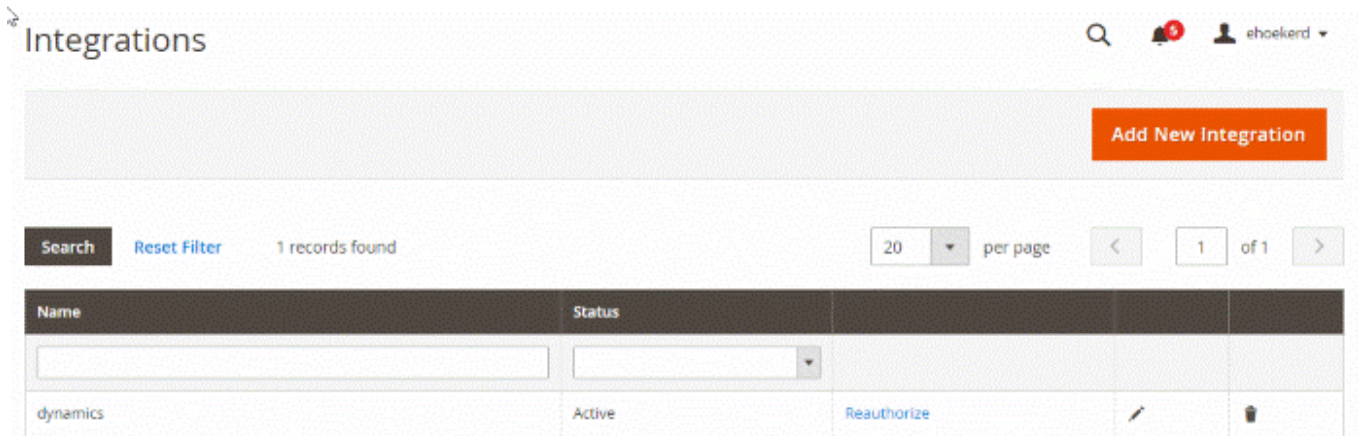
7 E-commerce Platforms

7.1 Magento 2.x

We support Magento 2.x Open Source and Commerce editions.

How to setup integration with BC?

- Login into backend of Magento
- Go to menu System | Integrations, this page will appear:



- Click the button 'Add new Integration'
- Fill in all required fields, don't forget to click the API
- Click Save and Activate the created integration

API Reference

- REST: <https://devdocs.magento.com/guides/v2.3/rest/bk-rest.html>
- SOAP: <https://devdocs.magento.com/guides/v2.3/get-started/soap/soap-web-api-calls.html>

7.2 WooCommerce

WooCommerce is an e-commerce plugin for the cms WordPress. WooCommerce is a flexible e-commerce platform.

How to setup integration with BC?

Login into the backend of Woo. Navigate to : WooCommerce - Settings - Advanced - REST API - Add Key

Write down the consumer key and consumer secret. You will need this credentials to enter in the Sales Channel Card for WooCommerce.

The screenshot shows the WordPress admin dashboard. At the top, there's a notification for a WooCommerce update. Below that, the Jetpack connection screen is visible, with a button to 'Install Jetpack and connect'. The REST API settings page is also shown, with a table of API keys.

Description	Consumer key ending in	User	Permissions	Last access
<input type="checkbox"/> dynamics	...d89435d	ortho	Read/Write	April 7, 2019 at 11:58 am
<input type="checkbox"/> Description	Consumer key ending in	User	Permissions	Last access

Setup Sales Channel Card

Go to Assisted Setup, choose the option WooCommerce. When the Sales Channel page opens, you can enter the details from WooCommerce:

API reference

Technical documentation on the REST API can be found here:

<https://woocommerce.github.io/woocommerce-rest-api-docs/>

7.3 Shopify

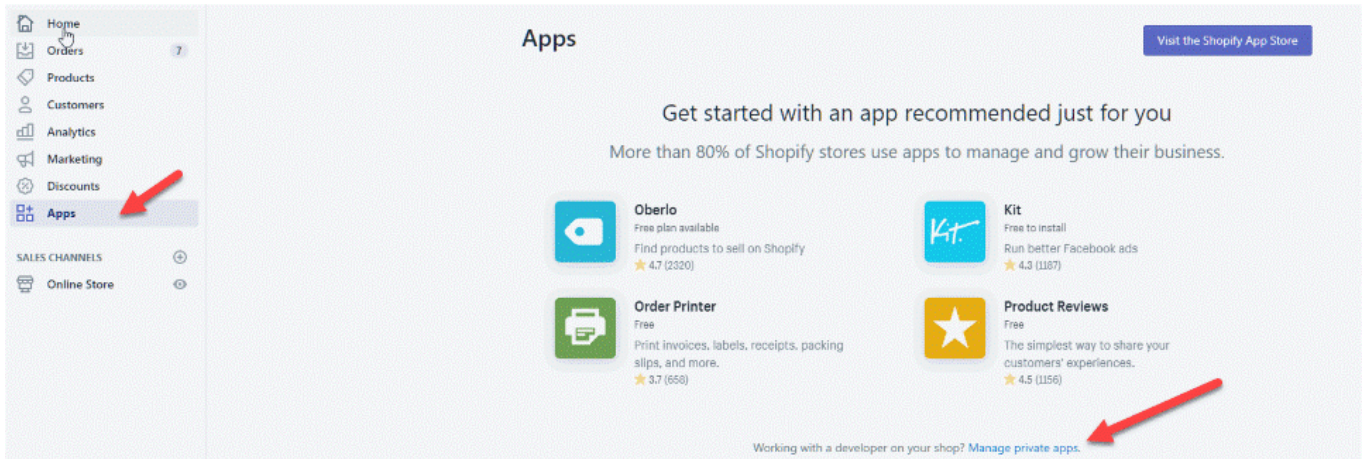
Shopify has 5 different editions:

- Basic Shopify
- Shopify
- Advanced Shopify
- Shopify Plus
- Shopify Lite

The Tinx connector works with all 5 versions.

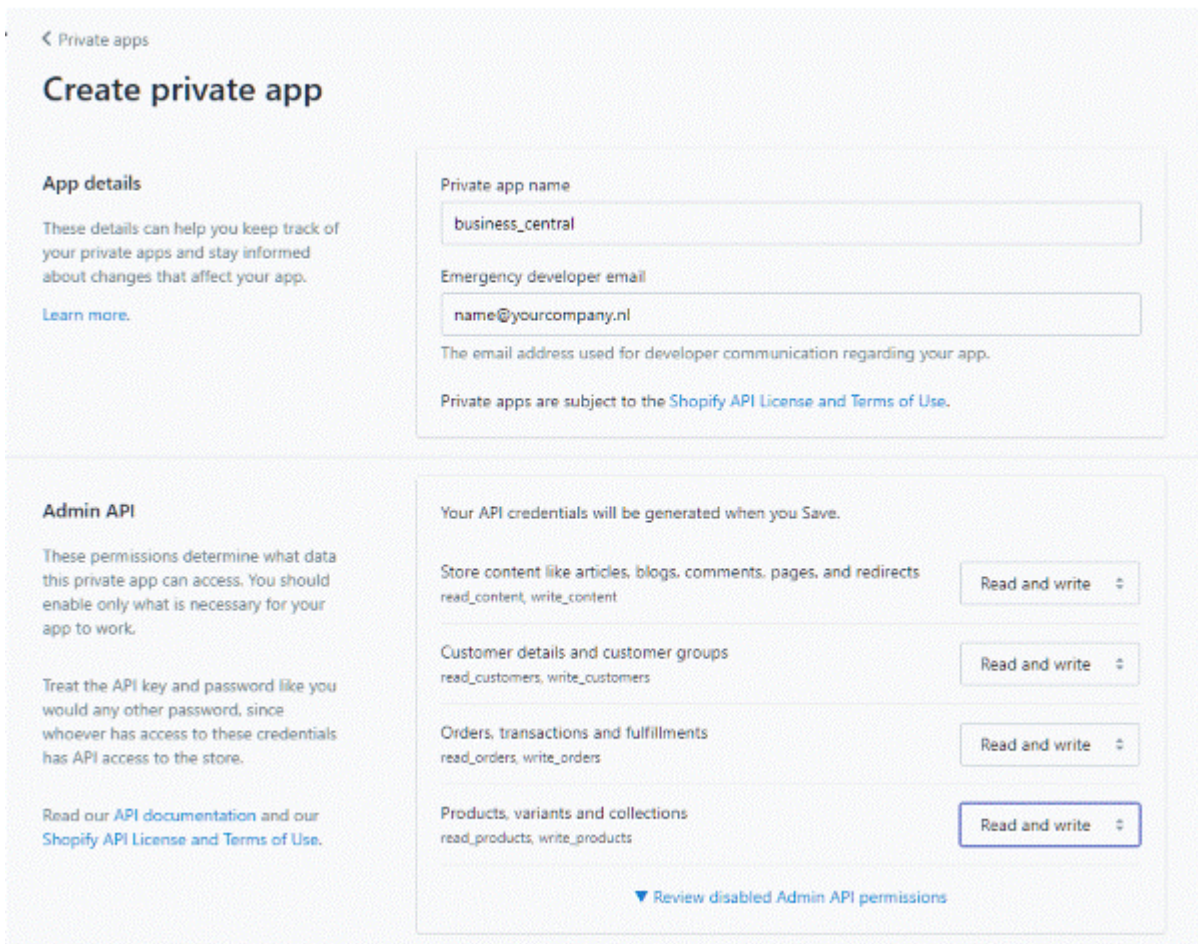
How to set up integration with BC?

Login in the backend of Shopify. Go to menu option Apps in the left, next click 'Manage Private Apps'



Create a new private app

For the Admin API select Read and Write access



API documentation

Shopify delivers a REST Admin API for integrating software. The API reference you can find here:

<https://help.shopify.com/en/api/reference>

7.4 Amazon

How to setup integration with BC?

Sales Channel Card